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APRIL 11, 1966

RAILWAY AGE WEEKLY

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How MoPac keeps tabs on M/W machines

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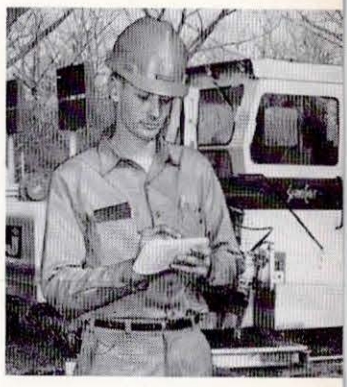

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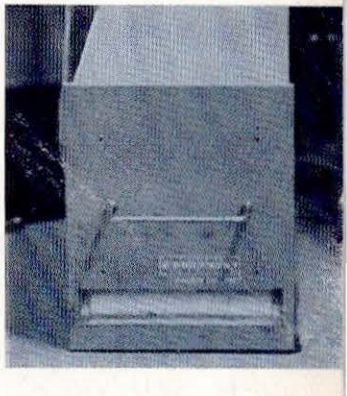

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Santa Fe cars ready for unit-train hauls

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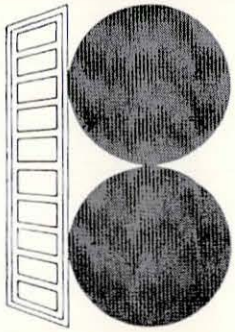

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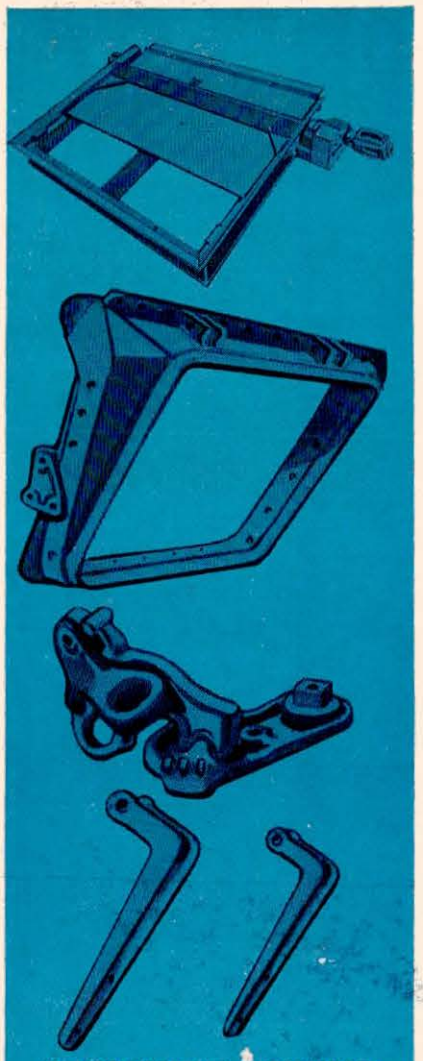

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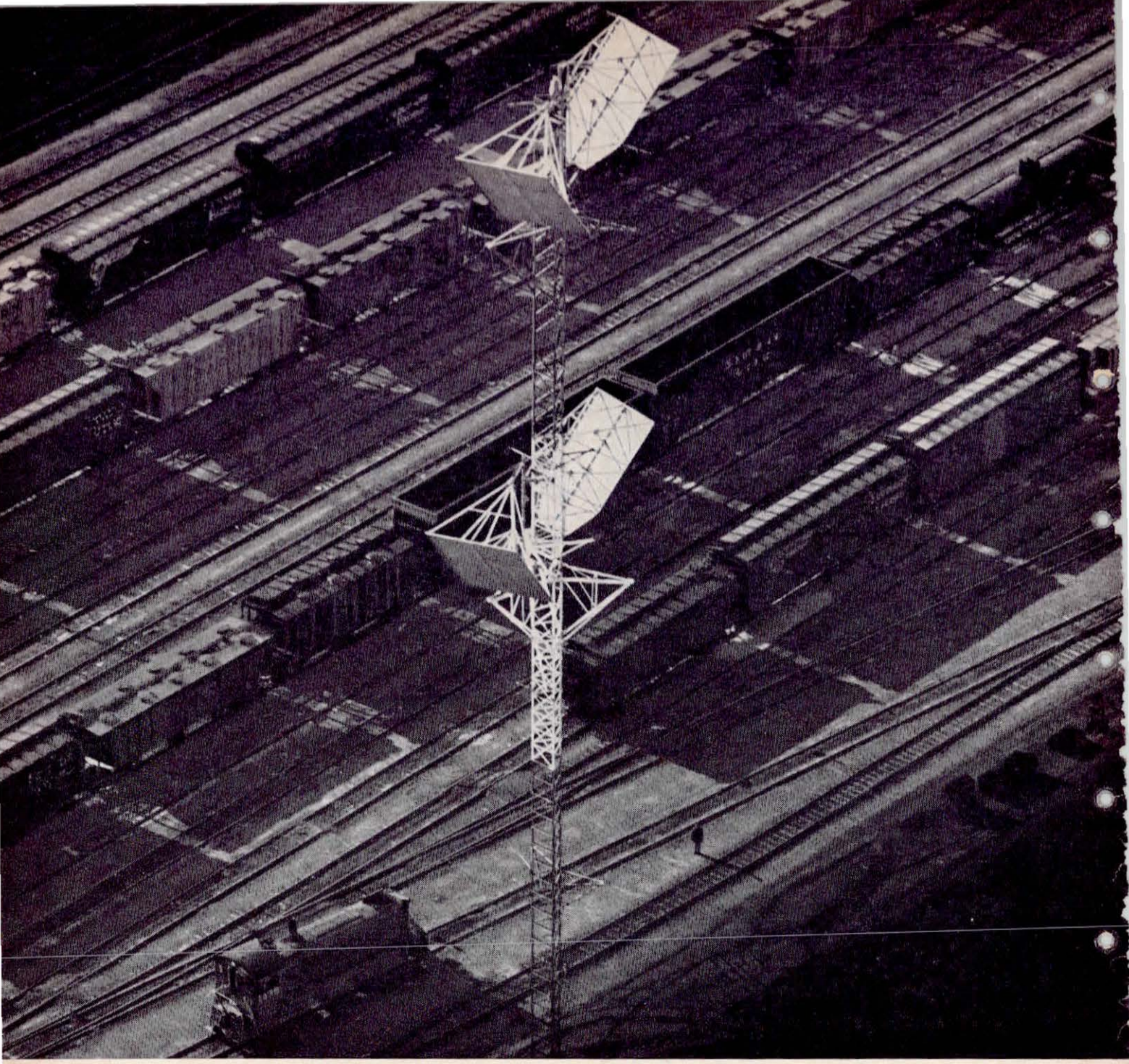

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Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada.

Published weekly (except for four issues combining two-in-one) by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange, Conn.

Railroad employees' subscription rate: U. S. possessions, Canada and Mexico, $6 one year, $8 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60¢ except special issues. Address all subscriptions, changes of address and correspondence concerning them to Subscription Dept., Railway Age, Emmett St., Bristol, Conn. 06011.

Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.

Circulation Dept.; John Rogers, Circulation Manager, 30 Church St., New York, N. Y. 10007. POSTMASTER—SEND FORM 3579 TO EMMETT ST., BRISTOL, CONN. 06011.

Printed at the Wilson H. Lee Co., Orange, Conn. 06477. Second-class postage paid at Orange, Conn. and at additional mailing offices.

Editorial and Executive Offices
New York, N.Y. 10007, 30 Church St.
Western Editorial Offices
Chicago, Ill. 60604, 14 E. Jackson Blvd.

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LUTHER S. MILLER: Editor
JOHN D. MITROS: Western Editor

Managing Editor: Fred C. Miles
Traffic-Transportation: Gardner C. Hudson
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Editorial Assistant: Wanda Brown

Washington, D.C. 20004, National Press Bldg.
Washington Editor: Walter J. Taft

London, W.C. 2, England, 4, Talbot House; 98 St. Martin's Lane
International Editors:
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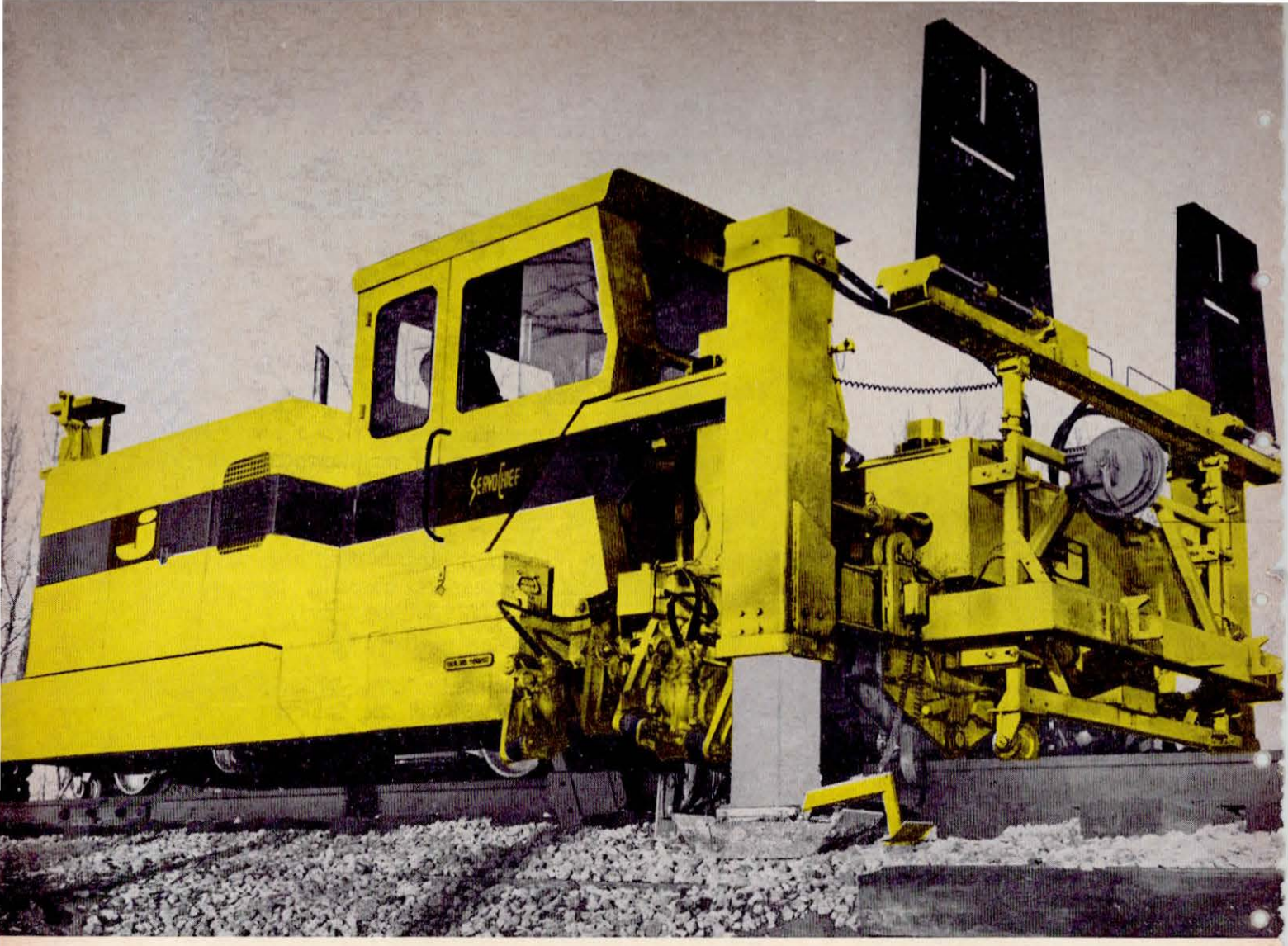

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SHORT AND SIGNIFICANT

NYC puts the accent on foreign trade

All overseas freight operations of the New York Central will now be handled by a newly-created International Freight Sales department. John G. Patten, vice president, freight sales, said reorganization of the road's foreign freight activities is in keeping with the "steady expansion of marine Flexi-Van containers in international trade." Central's Flexi-Van service, inaugurated in April 1958, has handled more than a half million units in domestic and foreign trade. The road expects the expansion of all-container ship operations in the Atlantic trade (RA, Mar. 28, p. 95), to have a strong impact on its overseas service. The Trans-European Road Rail Express train, scheduled to begin service later this year, will be carrying NYC Flexi-Vans exclusively between the Benelux countries and northern Italy. NYC has international freight sales offices in New York, and a branch in Chicago.

Two studies to aid Northeast Corridor work

The Commerce Department has signed contracts with two firms to do transportation studies related to the $90-million high-speed ground transportation project in the Northeast Corridor. CONSAD Research Corp. of Pittsburgh will get $250,000 for a 15-month appraisal of the impact that new transport facilities have on a region. The Center for Regional Economic Studies of the University of Pittsburgh will assist. Techniques developed will be used for developing regional transportation needs and will be immediately applicable to the Washington-Boston project. Traffic Research Corp. of New York City will be paid $122,860 for a three-month study to provide the transportation network data base for the Corridor project. Functional descriptions of total passenger and freight network will be used in a simulation model of the Corridor now being developed.

A new atmosphere control system for perishables

Another entrant in the field of atmosphere control for improved perishables transportation was announced last week as Whirlpool Corp. established a Tectrol Transportation Systems group. Pacific Fruit Express and Santa Fe mechanically refrigerated piggyback trailers have already been equipped with Tectrol systems; Whirlpool predicted that installations would soon be made on refrigerator cars. Lower oxygen levels and higher-than-normal nitrogen and carbon dioxide concentrations are said to reduce respiration of produce so that quality is virtually unchanged in the course of transportation. Previously, Linde's Polarstream and Best Fertilizer's Oxytrol systems have been announced; they rely partially or exclusively on maintenance of lower-than-standard oxygen levels.

Study shows strong demand for coal

Although we're living in an atomic age, coal is still the fuel choice of many power companies when they get down to building new electric generating plants. The National Coal Policy Conference, Inc., reporting on a nationwide survey just completed, said the nation's electric utilities are building new coal-fired generation plants at what is believed to be the greatest rate in history. In the six-year period, 1966-71, new facilities burning 103 million new tons of coal to produce 42 million new kilowatts of power will go into operation. The 77 new coal burning plants reported in this survey are located in 29 states, ranging from New England to Florida and to the Rocky Mountains, where, says NCPC, coal is now moving strongly into the utility picture.

MONDAY MORNING REPORT

Passengers and mail: A declining partnership

Annual reports from the railroads have been moving through the mails to shareholders for the past few weeks. And, for the most part, the state-of-the-railroad messages from company presidents have been liberally laced with heartening phrases like "a good year" . . . "showing continuing progress" . . . "a steady pattern of gains." But in the midst of what appears to be a growing plenty of healthy income figures are, in most reports, two entries in the income columns that continue to show signs of malnutrition. The sickly members: passenger revenues and mail revenues.

How to stamp out a mail train

The two declining entries usually appear together, being interrelated and, in a very real sense, interdependent, reflecting as they do the fall and decline of the American passenger train. Today, there are only about 1,100 intercity passenger trains on U.S. railroads, opposed to more than 3,400 in the 1950s and some 10,000 in the 1930s. As autos and airlines have siphoned off traffic, the railroads have had to take the trains off. And the remaining passenger trains that are struggling to make a go of it are having a tough time doing just that. But, interestingly enough, it's not just the lack of passenger patronage that's cutting the betting odds on the chances for the survival of passenger service. A contributing factor is the economic body blow that lands every time more mail is diverted from trains to trucks by the Post Office Department. The irony of this situation, as most observers see it, is that the federal government is, on one hand, calling for concerted research and development to save the nation's diminishing rail passenger service resources. On the other hand, it's helping to speed the posting of abandonment notices by diverting mail from the trains and plunging passenger operations deep in the red.

The Soo cuts back . . .

In the annual reports to their shareholders, the railroads are explaining what's happening to them. From the Soo's report: "The Soo has been engaged in a gradual withdrawal from its uneconomic passenger business. Chicago-Superior-St. Paul services were discontinued in January. As part of its 'Zip Code' program of mail handling, the Post Office Department removed all mail from the Twin Cities-Winnipeg trains at midyear."

. . . and ACL does the same

Atlantic Coast Line President W. Thomas Rice's report to stockholders had similar discouraging news on mail handling and passenger train discontinuances: "The Post Office Department has sharply curtailed its use of local passenger trains for the handling of mail, and this in turn will result in the annual loss in mail revenues to Coast Line, as now computed, of approximately $1,000,000. Many of the local passenger trains on which this mail was handled were sustained by the mail revenues. With the loss of these revenues it was necessary for your Company to embark on a program of passenger train discontinuances."

A problem to think about

The story, much the same across the nation, is reflected almost weekly in train-off petitions filed with the Interstate Commerce Commission by hurting railroads. If the railroads continue to lose mail to the trucks, the number of passenger trains running by the next time annual reports are due will undoubtedly be considerably smaller. Paul H. Reistrup, C&O-B&O director of passenger services, whose roads' passenger operations have been hit hard by the loss of sizeable mail revenues, poses a question that Post Office officials might ponder: "What's going to happen next Christmas or any time that the Post Office needs us, and there are no trains in operation to move the mail swiftly and reliably?"

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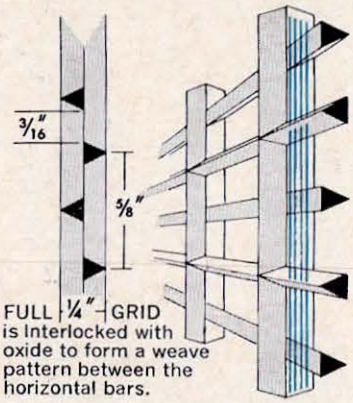

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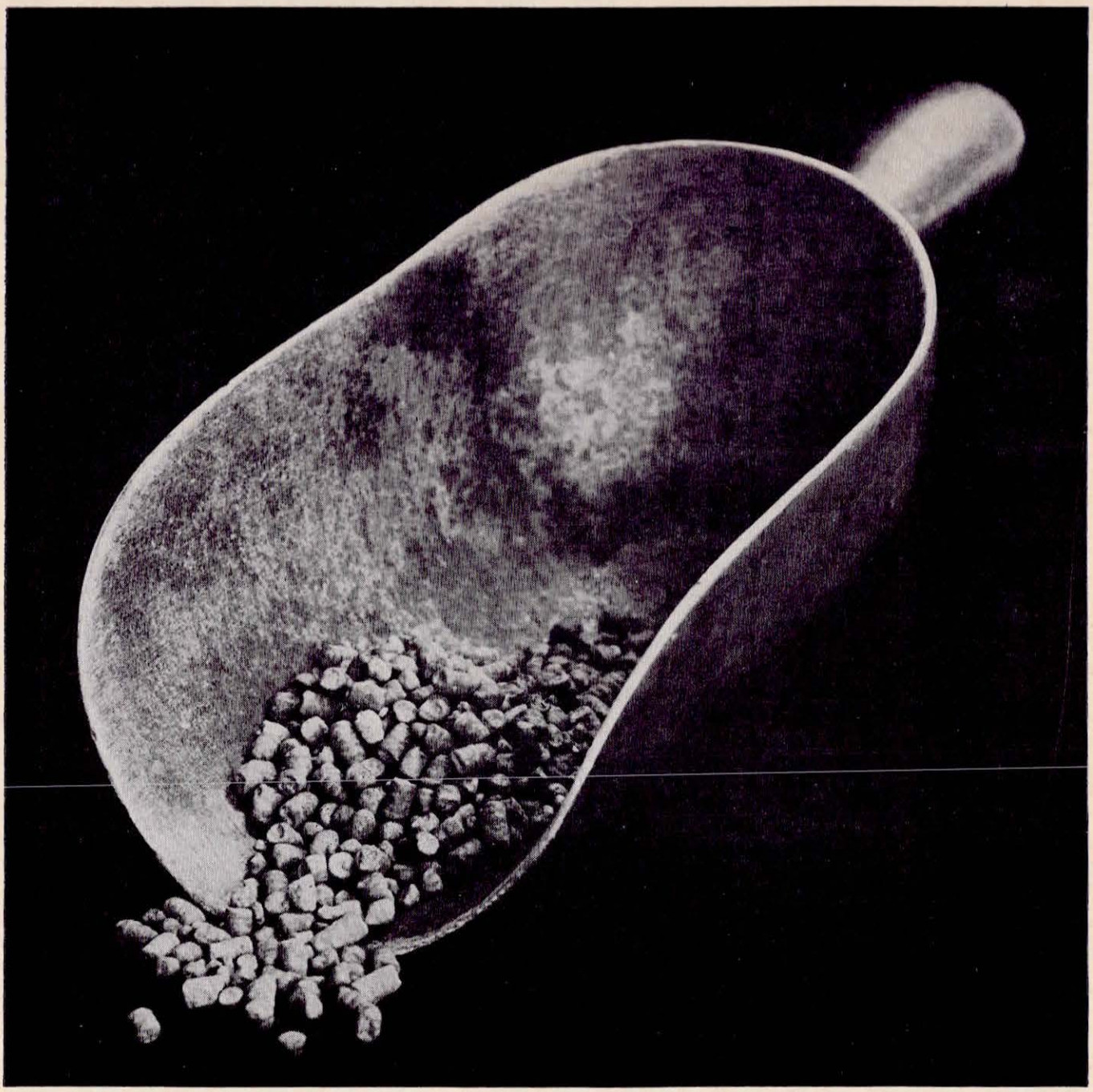

But we showed them. We threw those two tablespoonfuls of TORDON® 10K Pellets herbicide onto 30 square feet of brush. And in no time, no brush. All of which proves our point. It doesn't take many TORDON 10K Pellets for spot treating of brush along right-of-ways.

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WEEK AT A GLANCE

A four-day firemen's strike ends . . . .

Under fire from the railroads, the courts, the press and the White House, the Brotherhood of Locomotive Firemen & Enginemen last week called off the strike it launched against eight railroads March 31. From all indications, the union gained nothing from the walkout—and veteran observers were puzzling over what the BLF&E had even hoped to gain by its action. The organization had been under a court order not to strike March 31 to back up its demand that firemen's jobs abolished under the arbitration award be restored—but it struck anyhow, with the railroads' alleged failure to negotiate on a training-program demand as the stated reason for the work stoppage. The carriers obtained another court order applying to the actual strike, and then the picture really became murky. The BLF&E stayed on strike, Secretary of Labor Wirtz moved in for talks with union leaders, a federal judge set a deadline for a return to work and stipulated fines which would be levied against the union and its president, H. E. Gilbert, if the deadline were ignored.

. . . as President Johnson intervenes . . .

Still, the BLF&E seemed in no hurry to go back. Three union officers were sent to jail in the South; the possibility of much stiffer fines was raised. And President Johnson stepped in with a call for an end to the strike. But the union had its own terms. It demanded that there be no reprisals against individual strikers and it demanded assurances that the carriers would not press for contempt citations or damages. On the first point, there was no argument; The railroads, said J. E. Wolfe, chairman of the National Railway Labor Conference, weren't holding individual employees responsible. But the other two points, he declared, were matters for the individual railroads to decide for themselves.

Finally, on April 3, firemen began heading back to their jobs. Operations were quickly restored on the eight struck roads. But the end of the strike didn't put an end to the raising of questions—and the answers may be a long time coming.

. . . but the battle of the fireman still rages

Almost overlooked in the strike situation was the fact that the BLF&E was under restraint to bar a strike on restoration of jobs. A hearing had originally been set for April 4—but it's been postponed now until April 27. Meantime, there was another possible court argument brewing—this one over whether the union had or had not met the Sunday noon deadline for returning to work and, therefore, whether the BLF&E and Gilbert owed nothing or $27,500 in fines. The railroads did pull back on a request for stiffer fines—but there were indications that at least some of them intend to proceed with the filing of damage suits against the union.

RI control case set for hearing May 4

Rival applications for control of Rock Island will come up for hearing May 4 before ICC examiner Paul C. Albus at Chicago. Main applications are those of the Union Pacific and Chicago & North Western, the former being favored by the Rock Island management. Other applicants are the Southern Pacific, which would buy some RI lines if UP wins, and Santa Fe, which has a like arrangement with the C&NW. The hearing notice was accompanied by a report of a pre-hearing conference held last month. That report indicates that parties have agreed to furnish data which should make the record as to traffic movements and interchange much more comprehensive than that in previous merger cases. Presumably, this idea came in the aftermath of the Seaboard Air Line-Atlantic Coast Line case which the courts have pending on the reduced-competition factor.

Forest men call for a transport-needs study

The rapidly-expanding western forest products industry—which, in recent weeks has been complaining loudly about a shortage of railroad cars to move its traffic—wants to get together with the railroads to do a serious study of the forest industry's future transportation needs. The presidents of the Southern Pacific, Northern Pacific, Great Northern, Union Pacific and Milwaukee have been invited to join in the study with 10 forest products trade associations.

Gus R. Hubbard, chairman of the forest industry's Committee for Adequate Transportation, says each of the subdivisions of the industry is equipped with "well-documented projections concerning its future production," and that it would be as easy "to forecast our transportation needs as our need for raw material." He said plywood shippers alone will need at least 10,000 new box cars a year for the next decade. Plywood producers say they now have some 4,200 carloads of their products in warehouses that they are unable to ship because of the car shortage.

U.S. Supreme Court takes divisions case

The U.S. Supreme Court will review lower-court rulings which would send the East-West divisions case back to the ICC for more comprehensive findings. In issue is the Commission's 1963 decision, which would shift substanttial revenue from joint rates to Eastern and Midwestern lines. There has been a comprehensive settlement between Western and Eastern roads, so the only issues now before the court are those involving divisions of the Midwestern lines.

GUS WELTY'S LINES ON LABOR

WELTY

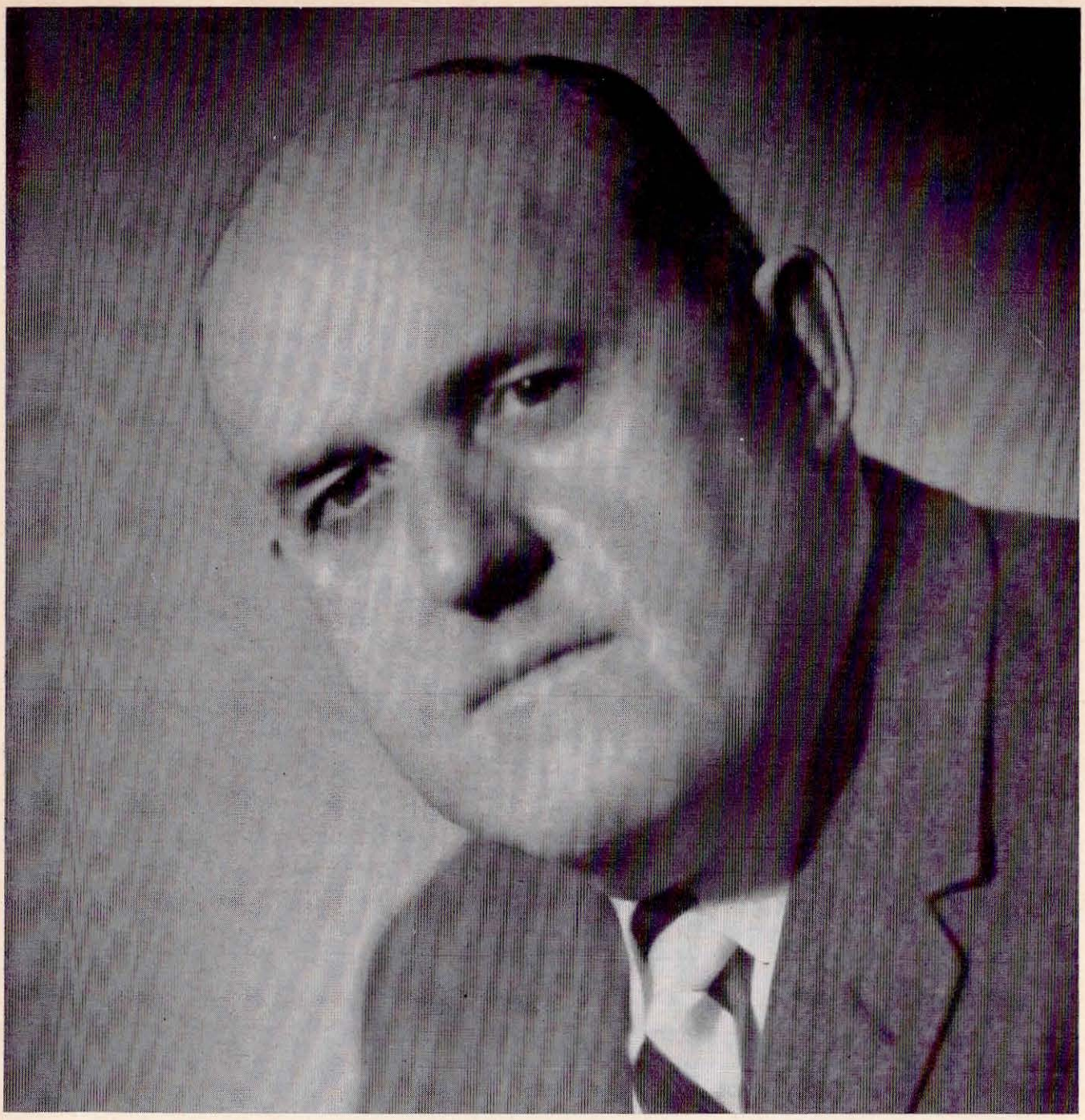
AND SO MARCH WENT OUT like a lion, with the Brotherhood of Locomotive Firemen & Enginemen roaring defiance. After the initial surprise of the BLF&E's action wore off, of course, the questions started coming—and most of them started with the word "why." Some observers saw the strike as a last-ditch effort by a mortally wounded union to score a coup, a quick-victory-by-surprise-attack which would, if nothing else, gain time for the union and delay further efforts by the railroads to eliminate those firemen remaining in freight and yard service.

CLOSER LOOKS at the situation, however, led a number of people to view the BLF&E action more as a test, a probing of defenses. For instance: Would the struck carriers cave in, when their competitors were still running? Would Seaboard duck out as Coast Line kept operating? Would UP sue for peace because Santa Fe and SP weren't hit? How about government? How far could the courts, the Congress, the President be pushed? What about the reaction of other rail unions? Would they and their members honor picket lines thrown up by the Firemen?

THE FIREMEN, presumably, have been studying what's happened in the hours and days following 12:01 a.m., Thursday, March 31. They've seen the railroads, once again, hold firm. They've seen the courts rule against the union—once again. They've seen the Administration try to get firemen back to work through persuasion, not—in the beginning, at least—through legislative means.

BUT HOW ABOUT the reaction of other unions? At the start of the strike, BLF&E picket lines were honored. But then some employees started back to work. Especially interesting was the reaction of the Brotherhood of Locomotive Engineers. In citing the alleged refusal of the carriers to negotiate on a training-program proposal as the reason for the walkout, the BLF&E gave the BLE an opening, and the Engineers stormed through it. On the matter of respecting picket lines, Grand Chief Engineer Perry S. Heath referred his members to Section 77(c) of the BLE Statutes—and the referral amounted to a directive to ignore the BLF&E pickets. Heath called the other union's effort an invasion of BLE jurisdictional and contractual rights. And Section 77(c) provides that when another organization's walkout has as a purpose such an invasion, "the BLE will exert all the force at its disposal in an effort to make it possible for engineers to report for and perform their normal duties."

GRANTING THE FEUD between BLE and BLF&E, and granting the opening given by the BLF&E's reason for striking. Heath might have stopped with the citation from the Statutes. But he didn't. "In my opinion," said the BLE grand chief, "this is an illegal strike."



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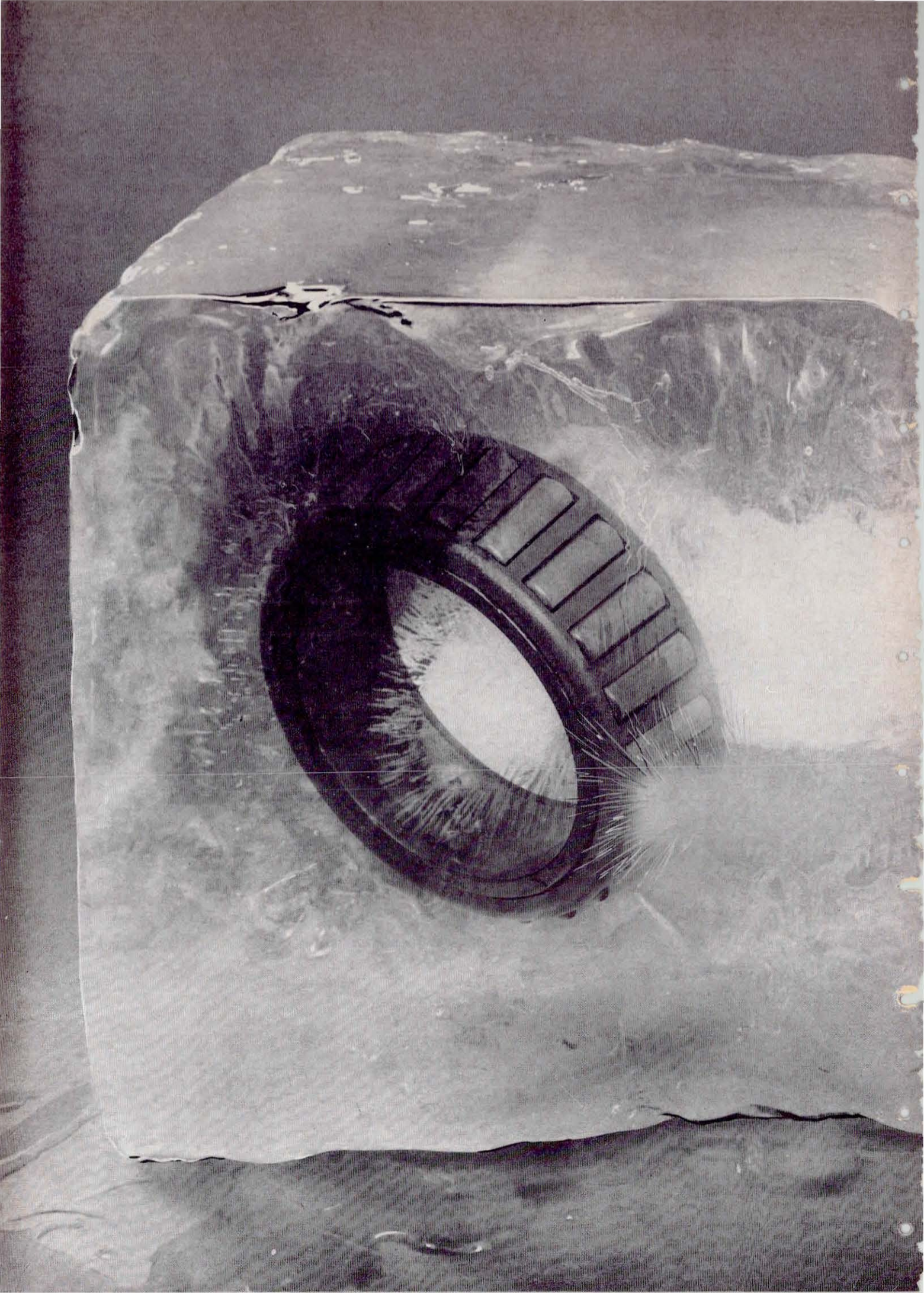

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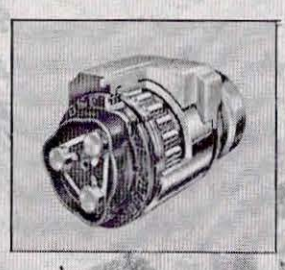

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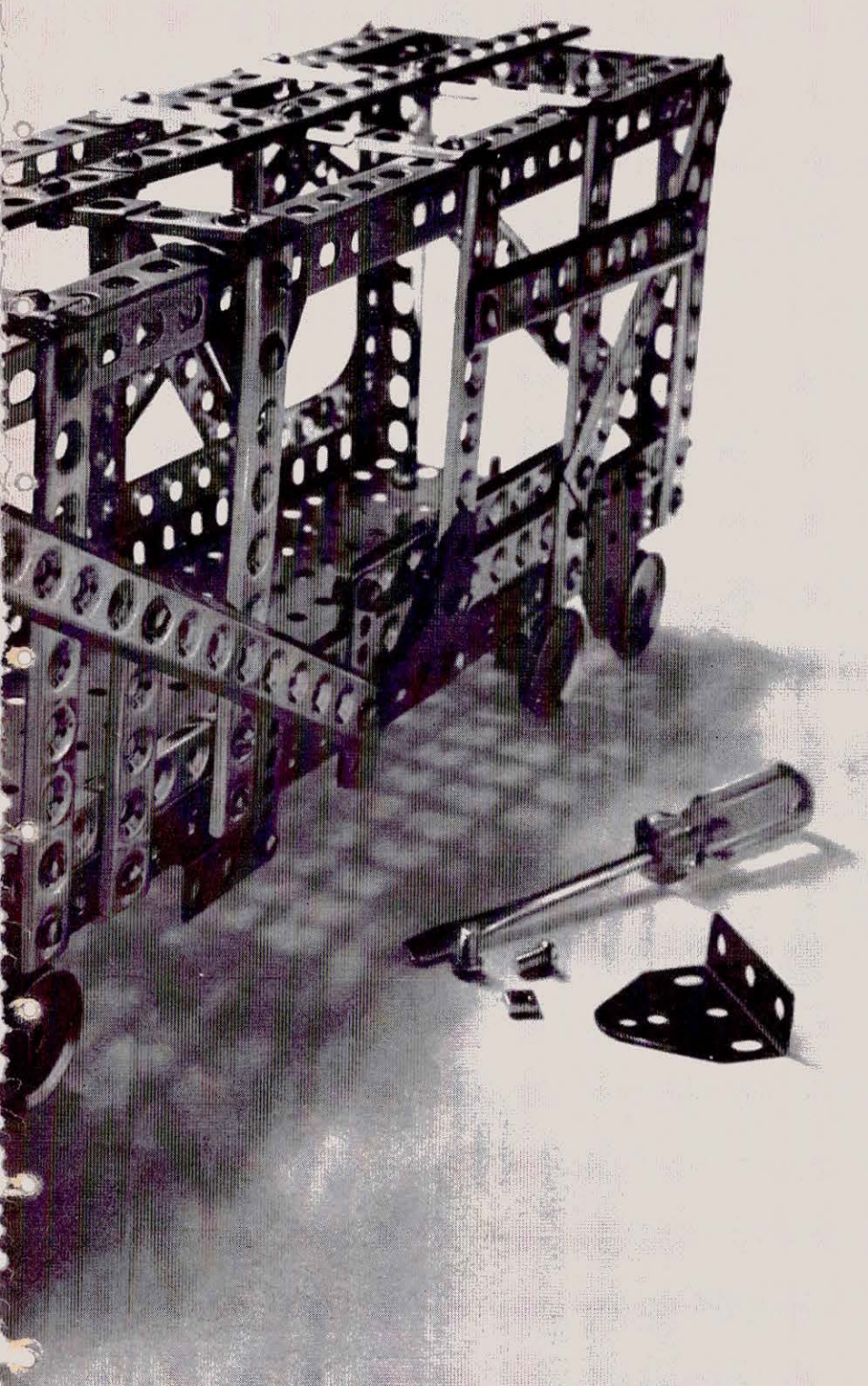

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Flexibility? Take your choice of 50-ft. or 60-ft. boxcars. Floor loads from 12,000 to 60,000 lbs. Interior equipment. Cushioning devices. And door openings from 54 options.

Over 10,000 ACF Precision Design Boxcars are now giving tiptop performance. For details write American Car & Foundry Division, ACF Industries, Incorporated, St. Charles, Missouri 63301, or our sales offices in Chicago, Philadelphia, St. Louis, San Francisco, Washington, D.C.

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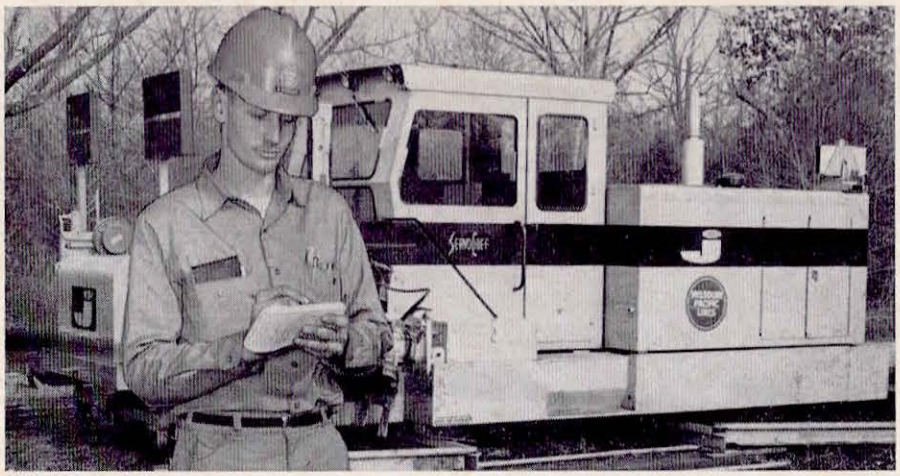
How MoPac keeps tabs on its M/W machines

"There is no question about it," said William E. Laird, Missouri Pacific's engineer of track. "Computerization of our roadway equipment utilization is helping us get much more out of our machines than we had been getting before. Our weekly print-out sheets are constantly recurring reminders which spell out the ways and means to get the most dividends from our large investment in roadway equipment."

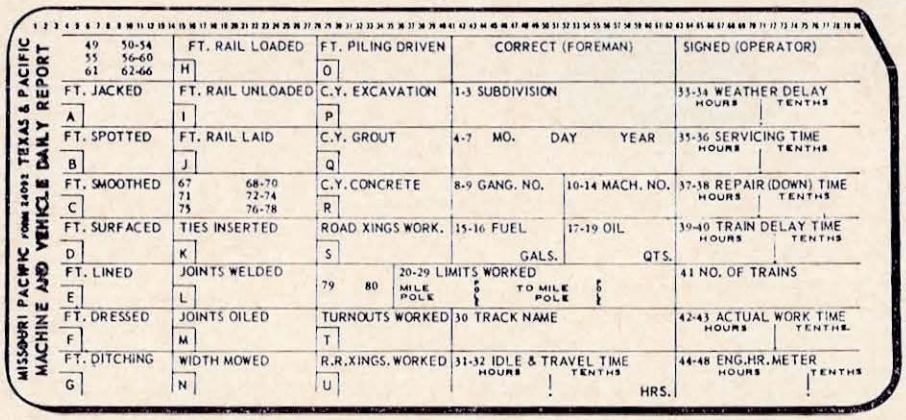
Laird was referring to the results MoPac is getting from a system it has put into effect for computerizing daily reports submitted by its work-equipment operators.

The system had its beginnings three years ago when MoPac's management questioned whether the company was receiving maximum dividends on the millions of dollars it had invested in maintenance-of-way machines and related equipment. While careful records of performance of the various makes and types of machines were being kept it had become apparent that other factors affecting performance were not available for study and comparison. If these factors were affecting the production of the machines, MoPac wanted to know it. It also wanted to learn exactly why and how to improve performance.

Charles W. Plunkett, engineer of signals, communications and equipment, was assigned the job of developing the answers for the hundreds of units of equipment on the system.



FIRST STEP: Machine operator makes out daily report required by Missouri Pacific's new system for improving the performance of its maintenance-of-way machines.

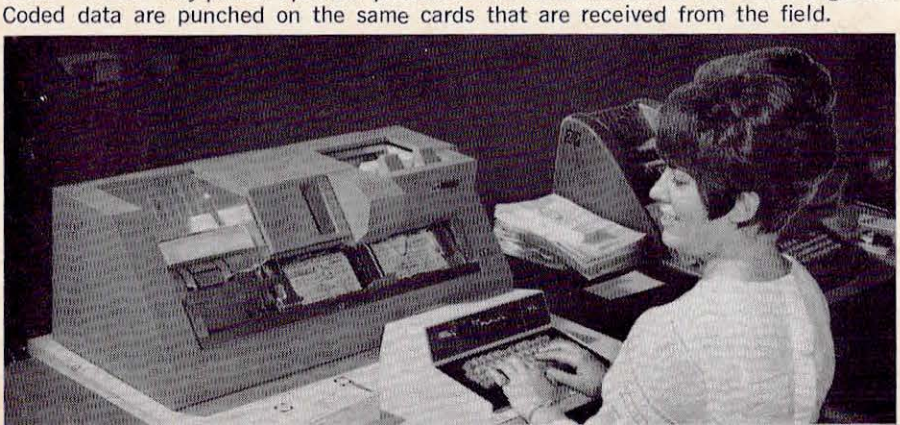


MISSOURI PACIFIC FORM 24092 TEXAS & PACIFIC
MACHINE AND VEHICLE DAILY REPORT

49 50-54 55 56-60 61 62-66	FT. RAIL LOADED H	FT. PILING DRIVEN O	CORRECT (FOREMAN)	SIGNED (OPERATOR)
FT. JACKED A	FT. RAIL UNLOADED I	C.Y. EXCAVATION P	1-3 SUBDIVISION	33-34 WEATHER DELAY HOURS TENTHS
FT. SPOTTED B	FT. RAIL LAID J	C.Y. GROUT Q	4-7 MO. DAY YEAR	35-36 SERVICING TIME HOURS TENTHS
FT. SMOOTHED C	67 68-70 71 72-74 75 76-78	C.Y. CONCRETE R	8-9 GANG. NO. 10-14 MACH. NO.	37-38 REPAIR (DOWN) TIME HOURS TENTHS
FT. SURFACED D	TIES INSERTED K	ROAD XINGS WORK. S	15-16 FUEL GALS. 17-19 OIL QTS.	39-40 TRAIN DELAY TIME HOURS TENTHS
FT. LINED E	JOINTS WELDED L	79 80	20-29 LIMITS WORKED MILE POST FROM TO MILE POST	41 NO. OF TRAINS
FT. DRESSED F	JOINTS OILED M	TURNOUTS WORKED T	30 TRACK NAME	42-43 ACTUAL WORK TIME HOURS TENTHS
FT. DITCHING G	WIDTH MOWED N	R.R.XINGS. WORKED U	31-32 IDLE & TRAVEL TIME HOURS TENTHS HRS.	44-48 ENG.HR.METER HOURS TENTHS

WHAT IT LOOKS LIKE: Daily report forms are made out in triplicate. Third copy is made of postcard stock. Chief engineer's address is printed on opposite side.

AND THEN: Key-punch operator processes the cards mailed to the chief engineer. Coded data are punched on the same cards that are received from the field.



● **Size of the undertaking.** "We needed to accumulate complete information on the daily performance characteristics of an average of 200 major maintenance-of-way machines," Plunkett said. "We needed to know where our tampers, liners, ballast regulators, brush cutters and cranes were working, and how much they were producing. We needed to know how much down time was being experienced, how many train and weather delays were being encountered, or any other factors that would influence production time."

But Plunkett foresaw the voluminous bookwork that would be involved in obtaining and analyzing such detailed information. He said: "It could conceivably have been uneconomical to maintain a sufficiently large clerical staff to tabulate the data manually."

Electronic data processing was the logical alternative. With a clear mandate from MoPac's chief engineer, Clarence Baker, to go ahead with the programming of a computerized reporting system on the performance of roadway maintenance equipment, Plunkett evaluated his problems and what he wanted by way of answers.

● **Specific goals cited.** "We wanted utilization reports on all major maintenance-of-way equipment for all operating subdivisions," he explained, "and we wanted our end-result information in such form that it would: (1) Show how machines could be transferred from one work area to another, based on requirements; (2) help in making decisions on when to buy new equipment, based on actual usage; (3) serve

ROADWAY EQUIPMENT COMPARISON REPORT DECEMBER 1965

MCH NO	S	TOTAL TIME	IDLE HRS	%	WTHR DLY HRS	%	TRAIN DLY HRS	%	NR TRNS	REPAIRS HRS	%	SERVICE HRS	%	ACTUAL WORK HRS	%	MILES WORKED	FEET PER ACTL WRK HR	DAYS RPTD	DAYS WORK
MAT20	2	216.0	86.3	40.0	13.0	6.0	33.5	15.5	64	5.0	2.3	9.0	4.2	69.2	32.0	13.2	1003.9	27	21
MAT21	1	176.0	52.0	29.5	8.0	4.5	.5	.3	1	60.0	34.1	12.5	7.1	43.0	24.4	8.8	1080.6	23	9
MAT22	3	200.0	33.5	16.8	8.0	4.0	76.2	38.1	158	7.3	3.7			75.0	37.5	17.4	1222.9	25	24
MAT26	5	200.0	45.7	22.9			17.3	8.7	35	57.5	28.8	9.3	4.7	70.2	35.1	10.5	786.3	25	17
MAT27	5	183.5	34.5	18.8			63.6	34.7	139	24.0	13.1	13.0	7.1	48.4	26.4	9.6	1042.4	24	21
MAT28	4	174.0	27.9	16.0			20.6	11.8	43	19.0	10.9	1.5	.9	105.0	60.3	17.9	897.9	25	21
MAT29	3	187.1	47.0	25.1			35.9	19.2	79	7.5	4.0	11.7	6.3	85.0	45.4	17.7	1099.1	25	23
MAT30	1	120.0	40.1	33.4			5.4	4.5	9	13.0	10.8	7.0	5.8	54.5	45.4	11.8	1143.7	15	13
MAT31	1	112.0	27.5	24.6			21.2	18.9	49	3.5	3.1	7.3	6.5	52.5	46.9	10.2	1030.5	14	12
MAT32	2	152.0	26.5	17.4			17.0	11.2	35	33.5	22.0	14.5	9.5	60.5	39.8	9.6	842.0	19	14
MAT33	4	199.7	39.7	19.9			34.3	17.2	55	2.5	1.3	7.7	3.9	115.5	57.8	20.7	947.9	25	24
TOTAL		1920.3	460.7	24.0	29.0	1.5	325.5	17.0	667	232.8	12.1	93.5	4.9	778.8	40.6	147.3	998.8	247	199

PERFORMANCE: Print-outs compare jobs done by machines of same type. This shows automated-tamper performance.

as a guide to determine if repairs and fuel consumption were costing more than the actual worth of the machine; (4) suggest how to set up a preventive maintenance program for the equipment itself; and (5) enable us to check on the amount of roadway maintenance being done on any given mile or miles of track, at the same time showing what sections of track were receiving excessive maintenance or machine time."

But these were not all the tabulations capable of being set forth in the projected reports, Plunkett pointed out. For example, the accumulated data would make possible a yearly report giving costs of all maintenance by track classification. Further evaluation of the data from the computer would provide guidelines for determining when a piece of equipment should be scrapped or retired, and, as a sidelight in this area, would reveal the performance of one manufacturer's machine vs. another's for the same class of machine.

● **Report form developed.** The Industrial Engineering department and Data Processing were asked to collaborate in setting up programs for the computer. Out of the planning sessions came a daily report form to be filled out by the operator of each machine. Initially, the form was 4¼ inches by 7 inches in size and was printed on special NCR paper stock. The forms were provided in triplicate in blocked pads.

The purpose of the report is to furnish all information required by the program. Lettered blocks are provided to indicate the type and quantity of work performed. Blocks identified by code numbers are shown in which are indicated the subdivision, the machine number, the gang number, the track worked, the quantities of fuel and oil used, idle and travel time, weather delays, service time, down time, train-delay time, number of trains, actual work time, and engine hours.

EQUIPMENT SHOWING EXCESSIVE IDLE TIME
2 HOURS OR MORE PER DAY

NORTHERN DISTRICT

SUB	MACH	IDLE TIME DATE	HRS	IDLE TIME DATE	HRS	IDLE TIME DATE	HRS
	BC002	12/13/65	4.0	12/14/65	8.0	12/15/65	4.0
	BC011	12/13/65	8.0				
	CT026	12/21/65	2.0				
	MAT21	12/20/65	8.0	12/21/65	8.0	12/22/65	8.0
	MAT21	12/23/65	4.0	12/14/65	8.0	12/13/65	8.0
	MAT21	12/15/65	8.0				
	MAT30	12/14/65	2.5	12/17/65	8.0	12/16/65	8.0
	MAT30	12/15/65	2.5				
	MAT31	12/16/65	8.0	12/15/65	7.0		
	MMT12	12/14/65	2.0	12/15/65	8.0	12/13/65	2.0
	PJT20	12/15/65	2.0	12/27/65	8.0	12/28/65	8.0
	PJT23	12/24/65	8.0	12/24/65	2.0		
	PJT26	12/14/65	2.0	12/15/65	4.0	12/16/65	4.0
	PJT26	12/13/65	2.0				
	PJT27	12/23/65	5.0	12/24/65	3.5	12/30/65	8.0
	PJT33	12/31/65	8.0	12/13/65	2.0	12/16/65	8.0
	PJT33	12/10/65	2.0	12/23/65	8.0	12/30/65	8.0
	PJT35	12/14/65	8.0	12/21/65	8.0	12/27/65	8.0
	PJT36	12/24/65	7.0	12/14/65	8.0		
	PJT36	12/30/65					

DETECTING LAGGARDS: MP's system is also used to determine the idle times of machines in excess of two hours. Results of such a check are shown in this print-out.

● **Engine-hour meters installed.** A decision made in the early planning stages of the program was that it would be essential to install engine-hour meters on all machines to register the number of hours the machine was actually performing service. This data would also be necessary in carrying out the preventive maintenance schedules for the equipment. The meters are similar to automobile speedometers.

General instructions for filling out the form were printed on the inside of the cover flap of the pad. Also shown is a table for changing minutes into tenths of an hour. This is necessary because working time has to be shown in tenths of an hour to meet the requirement that the "actual work time" must be held to three digits. Another tabulation gives code letters for the various types of tracks.

Further instructions are printed on a foldover cover of the pad. These contain brief explanations for filling out the various numbered blocks on the form, the heart of the whole reporting system. Still another tabulation identifies by a three-digit code number each of the MoPac's 149 operating subdivisions. The code numbers are used in indicating the particular subdivision on the daily report form.

● **System launched in 1964.** Inaugu-

ration of the new system was announced in a letter dated May 15, 1964, from the engineering department to district general managers, district and assistant district engineers, general roadmasters and superintendents of roadway machines.

The letter said in part: "All operators and mechanics will at the close of each working day prepare their respective reports, showing the machine or machines on which they worked that day . . . These reports will be prepared with an original and two copies. The original will be sent to the general office in St. Louis, Mo., via U.S. mail, to the attention of the cost engineer. The first copy will be sent to the district engineer's office, and it is suggested that the district engineer's copy be sent first to the roadmaster and then forwarded to the district engineer. The second copy will be retained by the operator or mechanic."

As the new system was inaugurated, representatives from the chief engineer's office made field trips to each of the district offices to explain completely its operation and how the new reporting form was to be used.

As the filled-in reports arrived at engineering headquarters in St. Louis, the data were transferred to standard key-punch cards, with the programming being set up to provide the variety of print-out information that had been planned. The daily key-punch job of 200 cards, with an average of 50 columns per card, was estimated to require two hours per day. In practice the time required has averaged an hour and forty minutes.

Some of the reports are made on a weekly, monthly and annual basis. Others are made only monthly and annually. Weekly print-outs are received in the engineering headquarters office on the Friday following the week covered in the report. Copies are sent to the general managers and district engineers of each operating district.

● **What print-outs show.** In print-out sheets covering machine performance and utilization the letter and number identification for each machine appears in the first column. A variety of information is given by different print-outs. One, for example, gives the results of a check made of the daily reports for excessive idle time. Instances of idle time exceeding two hours show up on this report.

Another report shows comparative performance information for machines of the same type, such, for example, as automatic tampers. For each machine this report shows such information as idle travel time, weather-delay time, train-delay time, number of trains, actual work time, miles worked, feet per actual work-hour, days reported and days worked.

Still another print-out, made weekly on a district basis, gives information on the utilization of all machines in service on a particular district during the period of the report. This report also gives such information for each machine as idle or travel time, weather delays, delays caused by passing trains, number of trains cleared, actual work time, hours out for field repairs, servicing time and the amount and kind of work done.

A report made on a system basis compares the production of machines of the same type and also compares similar machines of different manufacture by rate of production per unit of on-track time and also by operation and maintenance cost. Fuel and oil consumption are also tabulated.

Other details shown, too

Other system print-out sheets tabulate many details: total work performed; fuel consumption per actual working hour; total quarts of oil added between changes; engine-hours since last oil change; total servicing time; total down time; total repair time; average service time per day; total cost of repair labor, accumulated; total quarts of hydraulic oil added; total cost of repair parts; total days worked in report period; and average hourly production rate.

● **Form now IBM size.** The latest refinement in the operation of the system was inaugurated in January 1966. The old books of all-paper forms are being replaced with new ones the size of a standard key-punch card. As the thin paper original is filled out, a carbon copy duplicate and a triplicate are made, with the third copy being the standard size and weight IBM card. Blocked into books of 50 sets, the same coded information for the numbered blocks as hitherto used is printed on the key-punch card, though necessarily somewhat reduced in size. The reverse side of the card carries the first-class "Business Reply" mail permit with postage paid by addressee—the chief engineer's office.

These cards are so printed on the coded side that the key-punch operator can punch the card received by mail from the field by reading from it the coded information as written in by the roadway machine operator. The result is to eliminate the possibility of errors occurring when transferring information from the old paper form to the key-punch card. Also eliminated is the need for an envelope and stamp which the machine operators had to have with them each day to mail in their daily reports.

One of the early tangible benefits that resulted from tabulation of the first reports was a complete inventory of MoPac's maintenance-of-way power tools and equipment.

The inventory is maintained as a master deck of IBM cards which is easily changed. The print-out is used as a working form to post changes as they arise.

● **What MoPac is getting.** "In the final analysis," said Laird, in discussing the merits of the system, "we've come up with a broad-coverage monitoring system whereby we can watch how every one of our machines performs all over the system lines.

"Since copies of the weekly and monthly printout forms go to division superintendents and district engineers they can always see how the equipment in their territory is working—and they know, too, that we, in the general office also know, so it's natural that they will take steps pretty quickly to bring any laggards into better production."

The percentage figures in the weekly and monthly printouts, Laird told Railway Age, are perhaps the most meaningful, for it becomes apparent at first glance that if percentage of utilization against total work time on a given machine is consistently low, there must be reasons for it.

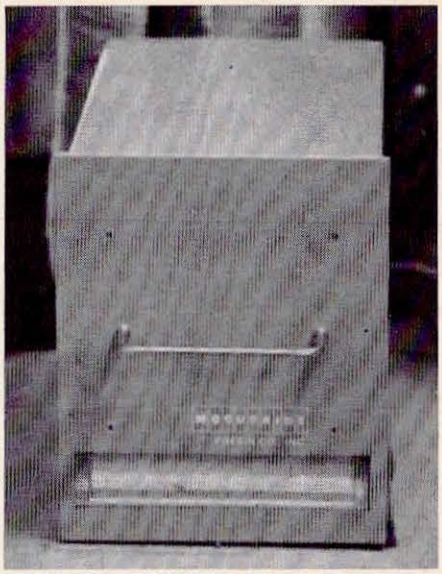
For example, other figures for the unit might reveal that excessive time is recorded under delays for trains. A study of the timetable for the area being worked could suggest that a different eight-hour work period for the machine — starting earlier or later — would avoid several scheduled trains that had been forcing the unit off the track heretofore.

In a specific instance, the performance record of a ballast tamper had been consistently less than its known capabilities. There were no good reasons apparent in the daily reports why so much idle time was shown. Checking with the field forces it was discovered that the work gang assigned to the machine had been doing a lot of road-crossing work and other activity not related to the functions of the tamper. When this was called to the attention of the local forces, the machine's performance record showed immediate betterment in subsequent reports. ■

TWO INSTRUMENTS in the rear end of NYC's Business Car No. 7 apprise officers of cross-level variations in track that are measured at train speeds. Read-out printer is on shelf at rear window; recorder console is on table at right.

NYC learns track conditions—fast

- **The road has developed a cross-level measurement system to help solve the problem of programming track surfacing.**
- **The system, which is designed to count and furnish printed read-outs by miles, is mounted on a business car.**



READ-OUT PRINTER has a pushbutton which, when pressed, causes instrument to print cross-level variations on tape.

Each fall maintenance officers must decide what track will be surfaced during the coming year. They try to select, from the many recommendations submitted to them by the division engineers, the worst-riding track for this treatment.

But C. T. Popma, New York Central's vice president-engineering, says: "In this day and age we need a better method than a person's judgment for determining track needs and where surfacing is required. European track men have gone far in this respect but their machines are too complicated. What we want for the New York Central is a simple device that will measure track irregularities and give us a printed read-out mile by mile."

He was making his ideas known to R. H. Wright, manager research laboratory, and R. H. Shackson, manager-applied research, of the road's Technical Research department at Cleveland, Ohio. Out of the discussion came the assignment to develop a system that was (1) capable of operation at all passenger- and freight-train speeds, (2) designed for installation in any car, (3) capable of semi-automatic operation, requiring no crew, and (4) designed to produce statistical information directly by mile, division, or other geographical unit, without need to interpret hundreds of feet of analog chart records.

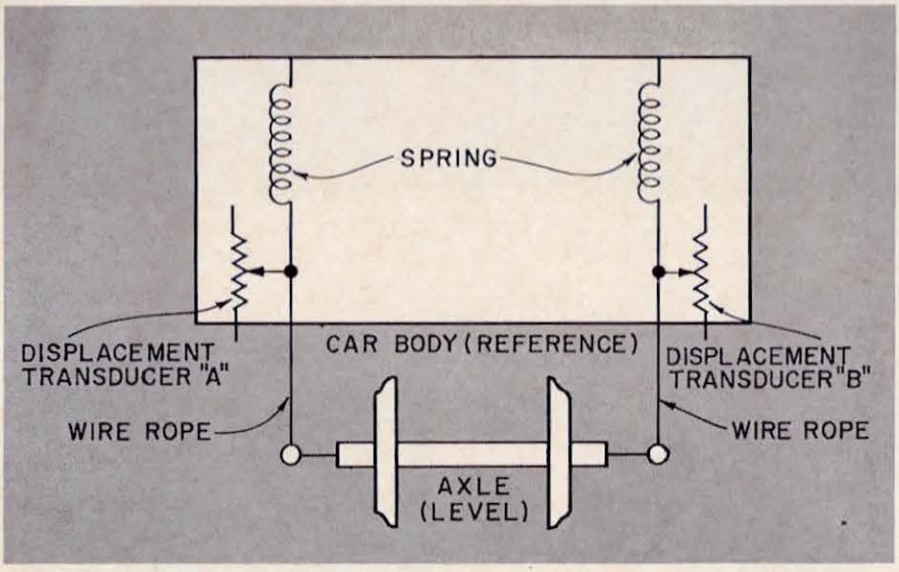
The research laboratory went to work on the problem. It started with the premise that the system initially could be confined to measurement of cross-level irregularities since it was reasoned that most poor-riding track is caused by uneven cross level. To provide a simple, fast-grading system, it was felt that the system had to be digital—that is, it would express results in the form of numerals.

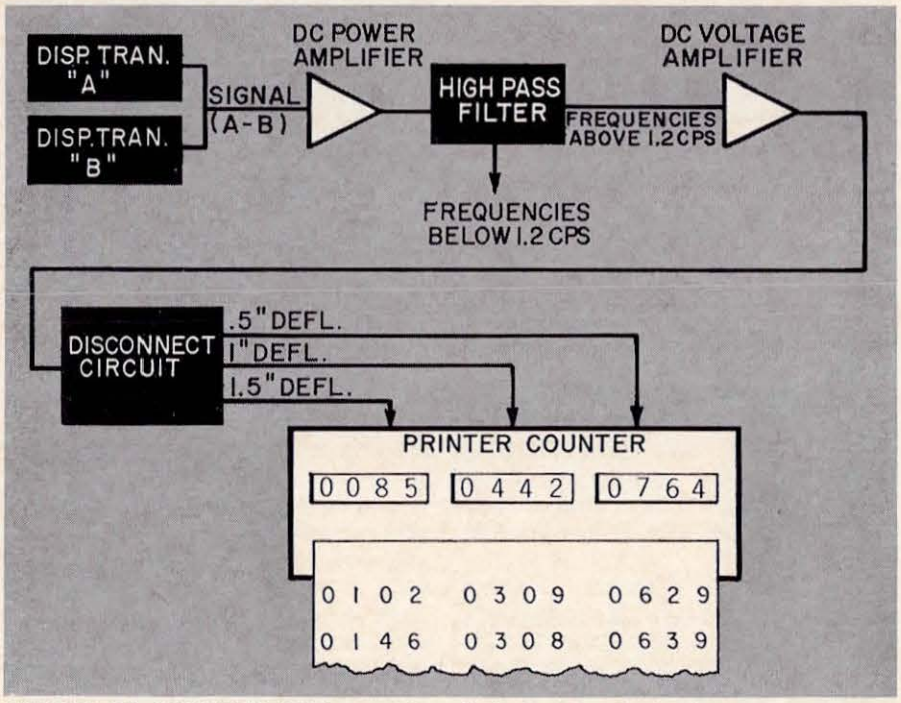
Using the laboratory's test car, the research staff tried out a number of methods to measure cross level. The method finally adopted was designed by L. R. Lombardo, project engineer-electronics, at the research laboratory. It measures dynamic cross-level changes under load and at train speeds.

● **Car body is reference.** The system uses the car body as a reference and uses transducers mounted on the car body to measure the vertical displacement of the axle ends in relation to the car body. The transducers are wired so there is no output if both axle ends are displaced equally in the same direction.

When the frequency of the cross-level variation exceeds the resonant frequency of the car body and spring system, the output of the transducers is equal to a combination of displacement due to cross-level variations and that due to car-body roll. It is known that the frequency of car-body roll is less than one cycle per second. Because cross-level variation frequency due to rail joints is above two cycles per sec-

UNEVEN CROSS LEVEL OF TRACK, which causes poor riding, is measured by transducers, using the car body as reference. Only the differences in cross level are noted. If both ends of axle rise an equal amount, no signal is transmitted to the recorder.





EFFECTS OF CAR-BODY ROLL must be eliminated to obtain the true cross-level variations. Frequencies of car-body roll are less than one cycle per second. These frequencies are screened out by a high-pass filter before the signals go to the printer.

ond at speeds above 35 mph, the system eliminates the effects of car-body roll by employing a high-pass filter. This device cuts off frequencies of 1.2 cycles or less per second, allowing only those that are above this amount to pass through. The signals above 1.2 cycles are then amplified, after which they are digitized in what is known as a Schmitt trigger circuit.

● **Counting the variations.** The Schmitt trigger circuit accepts these signals and sorts them out by frequency magnitude. Its transducers do nothing until pulses greater than a pre-set value are received. In the present NYC measurement system, Schmitt trigger levels are set to trip at cross-level variations of ½ in., 1 in. and 1½ in., although this instrument can be set quickly for other levels, such as ½ in., ¾ in. and 1 in. The number of times each variation is exceeded is stored in a printing counter. The information thus stored can be printed on tape on command, as at each mile post. After each printing the tape advances and the counters reset to zero automatically.

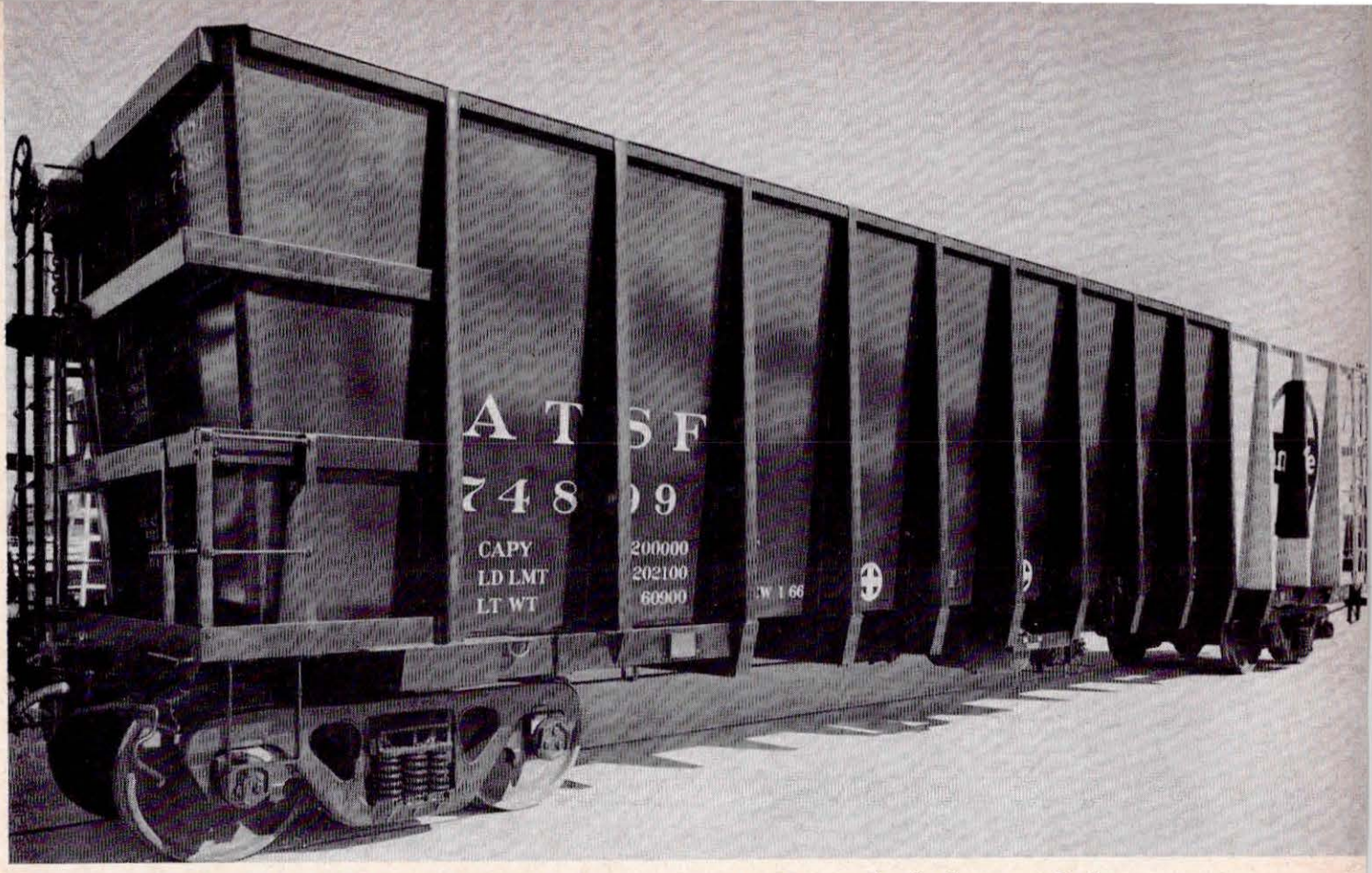
Shackson points out that the system is not intended to locate specific defects, although an analog read-out (pen recorder) is available for this purpose. NYC is not using the pen recorder because it would involve a time-consuming data-reduction process felt to be unnecessary at this time.

After being proved out on the laboratory's test car, another set of this equipment was installed on Popma's business car (NYC Car No. 7). The installation was made in one day. The read-out printer was placed on a shelf at a rear window of the car where the observer can watch the track and, by push-button, cause the totals to be printed at each mile post.

A recorder console also was installed in the car's dining room. When the switch is turned on the instrument shows the cross-level variations as they occur by three light indicators, one for each of the levels selected. It also has a meter dial for registering the magnitude of variations in cross level.

"We are still experimenting with the instrument," Popma says, "and we have not yet decided what our standard tolerances in cross-level variations should be. We will use the device to check main-line track at least every two months. As we learn more about what we want, we will add horizontal and vertical accelerometers which will add dynamic action to it."

With slight modifications, Shackson says, the system can be made to punch IBM cards directly for additional computer analysis. Experiments are now under way by the research laboratory staff to add surface and gauge measurement to the system. ■



HIGH-SIDE GONDOLAS holding 100 tons each are fitted with rotary coupler for unloading in dumper at Fontana.

Santa Fe cars ready for unit trains

DELIVERY OF FIRST CAR marked formal dedication of Transco plant attended by R. Hughartt, Apex Steel; F. J. Steinberger, vice president, Santa Fe; A. E. Heiner, vice president, Kaiser Steel; C. R. Johnston, president, Transco; and A. Groos, chairman, San Bernardino Board of Economic Development.

Mine at end of new branch line to be connected to Kaiser Steel plant by long-haul unit train.

The Santa Fe's newest coal-carrying operation—not to Newcastle but to California—will be the assignment of 101 recently delivered 100-ton gondolas. Actually, there are no significant local coal deposits in the Golden State, as there are near Britain's Newcastle. To supply raw material for coke used in its blast furnaces at Fontana, Calif., Kaiser Steel has opened a new mine in northeastern New Mexico, almost 1,100 miles away.

The coking coal will be moving in an 84-car unit train which is to be loaded at York Canyon, N.M., every four days. To reach this new mining operation, the Santa Fe completed in November 1965 a 37-mile branch—a stretch of heavy duty railroad—northwest from its main line at French, N.M. Eleven diesel units are being added to the road's fleet as motive power for the train.

● **A revenue producer.** Kaiser Steel anticipates the use of 700,000 tons of York Canyon coal annually at Fontana. This will mean that, with its four-day turnaround of well over 2,000 miles, the unit train will have to handle 8,400 tons per trip. Santa Fe anticipates a gross of $4.2 million annually.

Significant in the Santa Fe's carrying of coal to California will be the fact that it is to move in California-built cars. The 4,000-cubic-foot gondolas are being turned out at the new car-building facility of Transco, Inc., at San Bernardino. The new Transco plant and supporting facilities occupy an area 500 feet wide and 7,300 feet long, adjoining the Santa Fe yard.

C. R. Johnston, Transco president, says that space is available for expansion. Much of the car assembly is now taking place in the open. Several buildings, however, including a sandblast building and a paint shop, have been completed. The main shop building is to be ready in June.

● **Opened in February.** The new Transco shop, for which ground was broken in November 1965, was opened formally in mid-February. One of the

R. G. LEWIS

AS THE PUBLISHER SEES IT...

A NEW EDITOR—"Responsible managers have no more important job," Jim Lyne once advised readers of his "After Hours" column, "than selecting and training their successors." Jim did not ignore his own advice. When he died, he left behind a group of editors stamped with that particular brand of responsible and enterprising trade journalism which distinguished his own career and that of his predecessor, Sam Dunn.

Effective with this issue, Executive Editor Luther Miller, the closest associate of Jim's later years, becomes editor of Railway Age. He assumes that office with the support of a staff—in New York, Chicago, Washington and London—as strong as any editor has had in this magazine's 110 years of publication.

ONLY THREE IN 55 YEARS—Arthur McGinnis, president of Simmons-Boardman, reminds me that Luther is only the third editor of Railway Age in the last 55 years. Sam Dunn (noted for leading the fight to restore railroads to private operation after World War I) held that position from 1911 to 1949, when Jim Lyne took over. Men like Sam Dunn and Jim Lyne are, in the old vaudeville phrase, tough acts to follow. But even that is a tradition at Railway Age.

One of our former editors, Silas W. Dunning (1871-1887), directed the "battle of the gauges" in the pages of this paper. As our Centennial issue reported, he was "instrumental in saving the country from the folly of the narrow-gauge enthusiasts who would have 'Balkanized' the railroad network."

OTHERS OF THE BREED—Henry G. Prout became editor in 1887, after his retirement with the rank of colonel from the General Staff of Egypt's military forces. He played a major role in the decision of Congress to dig a canal through the Isthmus of Panama rather than through Nicaragua. He later became vice president and general manager of the Union Switch & Signal Co.

Harry P. Robinson, an Englishman who became publisher and co-editor in 1891, organized the American Railway Engineering and Maintenance of Way Association (now the AREA and the Engineering Division, AAR). He subsequently returned to his England and was knighted by King George V for his work as a war correspondent for the Times of London.

CHANGING TIMES—The demands of any profession change subtly over the years. Present times, in the communication business, demand a combination of journalistic skills and knowledge of the field. Our new editor made his mark quickly in both respects. His first assignment at Railway Age (when he came here in 1958 from the Federation for Railway Progress in Washington, D.C.) was to research and write the now-famous "Trap" report on obsolete working rules. He went on to become news editor and, in 1962, executive editor. He worked closely with Jim Lyne and our editorial director, George Dusenbury, and myself, in revamping and modernizing Railway Age from cover to cover.

A HOPEFUL TRAVELER—Several years ago Luther Miller became one of the first western writers to travel all the way into and out of Russia by train. In his report for Railway Age, he wryly recalled the old maxim that "it is better to travel hopefully than to arrive." He is still, he tells me, travelling hopefully, and considers his present appointment only the beginning of a challenge.

My own feeling being that publishers publish, and editors edit (though each, in this business, must do some of both), I now turn over this space to the editor. Next week's column will be headed, "As the Editor Sees It . . ."

Santa Fe's unit-train cars was first to come off the line. Two 10-station lines have been turning out three of the gondolas each day.

The assembly tracks will be covered progressively as the 73,000-square-foot main shop building is assembled. Installation of overhead cranes and other equipment will change many of the assembly procedures now used. A possibility, according to Johnston, is the construction of a 40,000-square-foot fabricating shop which could build subassemblies ranging in size up to complete underframes.

● **High-side gondolas.** The Santa Fe gondolas are similar in design to a number of other high-side, solid-bottom open-tops turned out for unit-train service. Each car is fitted out for unit-train service. Each car is fitted with a rotary coupler at one end because Kaiser plans to unload the coupled train in a rotary dumper at Fontana. The color scheme of brilliant yellow at the A end, where the rotary coupler is installed, and Indian black for the remainder of the car, will make it readily apparent if two of the non-rotating couplers are ever joined.

NEW SANTA FE COAL CARS

Length, feet-inches:	
Over strikers	50 - 5½
Inside top chords	47 - 9½
Inside at floor	46 - 3¼
Truck center distance, feet-inches	40 - 6
Width, feet-inches:	
Inside top chords	10 - 0
Inside at floor	8 - 5¾
Over side posts (extreme)	10 - 8
Height from rail to top of car, feet-inches	12 - 8-9/16
Capacity level full, cubic feet	4,000
Maximum light weight (est), pounds	60,000

The car is an all-welded assembly. End and side sheets are sloped 5 degrees from the vertical. The side sheets are designed to support the fully loaded car in a rotary dumper. In the car floor are ½-inch drain holes. The center sill is two 41.2-pound Z-26 sections welded full length. The strikers, bolster center fillers and rear draft lugs are built-up welded designs secured to the center sill by welding. Body bolsters and some of the 11 crossbearers are welded construction of Kaiser alloy steel. The 26 side posts are ¼-inch low-alloy high-tensile steel pressed-plate hat sections.

In 50 of the cars the steels in contact with the lading are Kaisaloy 50 MV; in the remainder, Kaisaloy 50 CR. All other steels in the carbody contain a minimum of 2% copper for added corrosion resistance. ■

Blueprinting the new LIRR

The State of New York bought the Long Island from the Pennsylvania for $65 million, but didn't stop there: Plans are now being drawn up for a $200-million modernization program.

"You're purchasing 20 times more transportation than if you put your money into new public highways."

That's how PRR Chairman Stuart Saunders summed up what New Yorkers were getting, when they bought the Long Island Rail Road from the Pennsylvania for $65 million.

The actual sale took place last December, when Governor Nelson Rockefeller, on behalf of the State of New York, presented Saunders and David C. Bevan, PRR finance committee chairman, with a check for $10 million—the first installment. The balance was to follow soon after, as the deal was formally reviewed by the ICC, and the physical takeover prepared.

Joked LIRR President Thomas J. Goodfellow at the takeover ceremonies: "Since you're now a member of the family, Governor, we'll have to give you and Mrs. Rockefeller passes."

Quips aside, there was good news for Long Island commuters in all of this: the state was preparing to commit $200 million to a sweeping modernization program for the LIRR.

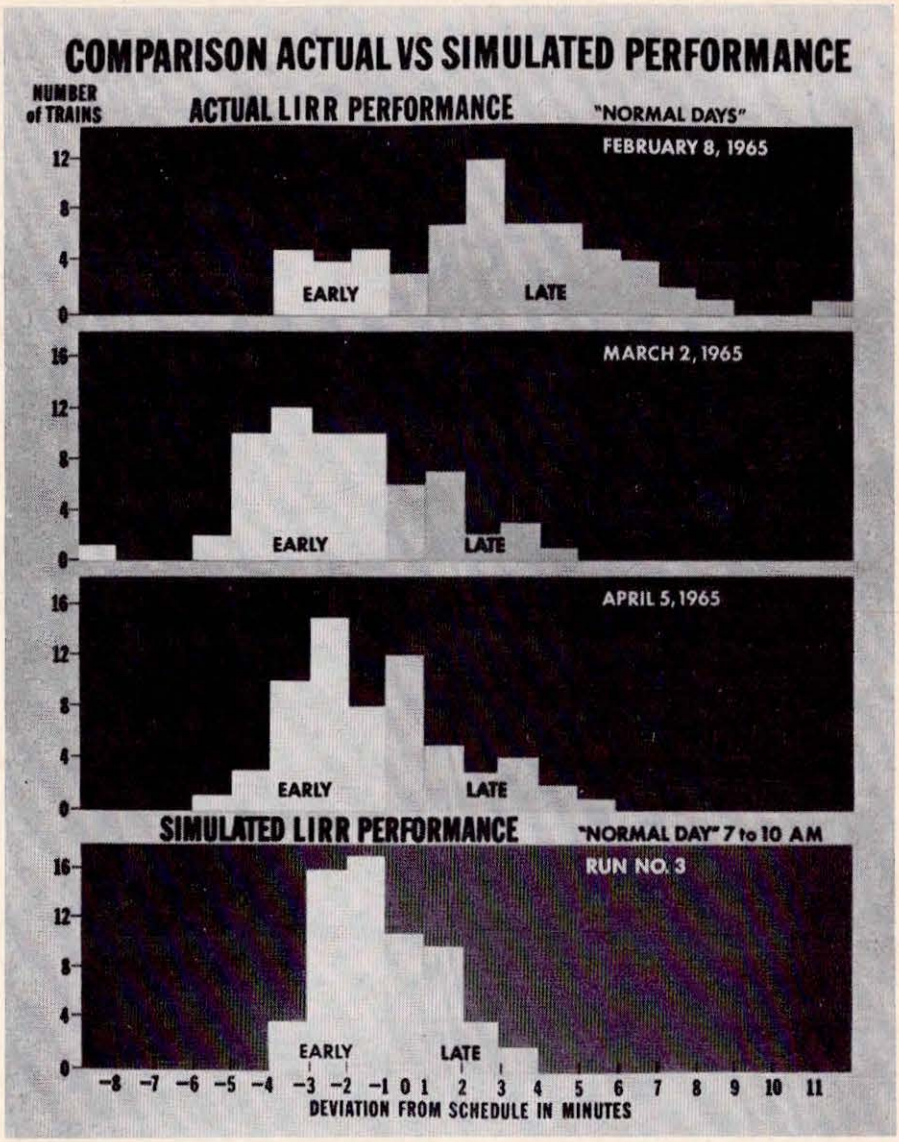
A new state body—the Metropolitan Commuter Transportation Authority—was created to oversee operations. The new regime obviously has its own ideas about how to run things, but has promised a hands-off policy with regard to day-to-day administration. One of the first acts of MCTA Chairman Dr. William J. Ronan was to guarantee the jobs of all 6,700 LIRR employees.

The amount of money the state is putting into the Long Island should make a big difference; the fact of state ownership probably will not.

● **Up from bankruptcy.** The Long Island, though, is something of a special case: public involvement in running the road predates the actual takeover, and goes back several years.

In 1949, the road defaulted on debts to its owner, the Pennsylvania, and went into bankruptcy. Equipment was run-down, deficits were spiralling upward. By 1954, the situation was deemed critical enough by all parties concerned for drastic action: the LIRR was reorganized as a railroad redevelopment corporation directly responsible to the state.

A 12-year rehabilitation program was worked out, under which the PRR agreed to forgive interest and amortization on debts to it from the LIRR, and to forego any return on its investment. The State in turn forgave the road its taxes, and sank $65 million into general upgrading of its physical assets.


COMPARISON ACTUAL VS SIMULATED PERFORMANCE
NUMBER of TRAINS
ACTUAL LIRR PERFORMANCE
"NORMAL DAYS"
FEBRUARY 8, 1965
EARLY
LATE
MARCH 2, 1965
APRIL 5, 1965
SIMULATED LIRR PERFORMANCE
"NORMAL DAY" 7 to 10 AM
RUN NO. 3
0 4 8 12 16
-8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11
DEVIATION FROM SCHEDULE IN MINUTES

IMPROVED ON-TIME PERFORMANCE, better scheduling are two goals of the computer simulation project in progress on the LIRR.

The reason for this, obviously, was the public stake in keeping rail commuter service afloat. With the 12-year agreement approaching its expiration, the outright transfer to state ownership simply acknowledges this stake formally.

● **No other choice.** Said Governor Nelson Rockefeller at the time of the transfer:

"To move the number of people into and out of New York City by highway that the Long Island does, would require 29 new traffic lanes.

"There is no real alternative to the continuation and improvement of the LIRR's services. To attempt to move people now carried by this railroad by automobile would be prohibitive in cost, improvident in the use of expensive land, and chaotic in its impact on traffic conditions in New York City."

Regardless of who owns the Long Island, added the Governor, "It's still running; that's the big thing."

● **LIRR assets.** What kind of assets are now on the State's property books? The Long Island operates 765 miles of

track, owns 80 locomotives, 1,192 passenger cars, 24 freight cars. It also owns 275 bridges, one tunnel, 285 buildings, 39 substations, and 3,290 acres of land.

In more abstract terms, the state is getting the country's largest passenger-carrying railroad, responsible for moving 260,000 people daily.

The kickoff for the new regime was the MCTA's announcement of its top-to-bottom modernization program. The broad outlines of this program were made known to the two consulting engineering firms of Parsons Brinckerhoff, Quade & Douglas and Gibbs & Hill, who were retained to make detailed studies of just how and where to spend the money.

● **Lots of new cars.** An important aspect is equipment replacement. MCTA has announced it will purchase 500 new m-u commuter cars. It is understood that Louis T. Klauder & Associates will assist the prime consultants in establishing car design criteria. First orders can be expected probably late this year.

At the same time, new equipment types may be in the offing. With the aid of federal and state grants, a Budd-built gas-turbine-powered car is being tested on a 20-mile line between Bethpage and Ronkonkoma, N.Y. At the end of the eight-month demonstration, a determination will be made as to the practicability of turbine powered operations, especially over non-electrified lines (RA, March 7, p. 25).

Another area being looked at is electrification. At the present time, 106 miles of track are electrified—tracks linking New York City with the close-in suburbs of Nassau County, plus a few communities just over the line in Suffolk County. With another 121 miles of track being considered for electrification, train-to-train transfers for Suffolk County commuters could be sharply minimized.

● **Subway tie-in?** To achieve better peak period service into and out of New York City, two schemes involving the New York City Transit Authority are under review.

One is for a third track to be added to the NYCTA's proposed East River Tunnel at 63d Street, scheduled for construction soon. The extra track would be used by the LIRR as an alternate route to Manhattan; trains would run to a new terminal on the East Side, and achieve a much better tapping of the area than is now possible.

The other is for Manhattan-bound Long Island trains to be routed over LIRR's Atlantic Avenue line through Brooklyn to the Flatbush Avenue Terminal, then move over to the NYCTA's BMT tracks, and continue over BMT lines into the downtown financial district.

"It's still running—that's the big thing."
—GOVERNOR ROCKEFELLER

"The commuter crisis is being confronted more realistically."
—DR. RONAN

"This is an important stabilizing step."
—LIRR PRESIDENT GOODFELLOW

The second scheme, if implemented, could well tie in with a previous study that PBQ&D did for the City of New York and the LIRR, concerning the latter's Flatbush Avenue Terminal. That study contained proposals for lengthening platforms to accommodate 85-ft commuter cars, providing additional subway entrances and passageways leading to LIRR platforms, and general refurbishing of the passenger loading area in the Terminal.

One of the thorniest problems facing the MCTA is what to do about relieving peak-period traffic congestion in the so-called Jamaica bottleneck—the Queens County staging point through which practically all LIRR trains now move.

Both short- and long-range solutions are being looked for, and a principal aid will be the computer simulation scheme now in progress. The scheme was commissioned from Westinghouse Electric, administered by the Queens-Long Island Demonstration Program, and is jointly sponsored by the City, the State, the Tri-State Transportation Commission, and HHFA (now HUD).

A digital computer was programmed to create a mathematical model of the railroad. Submodels account for track, trains, and train movements. Timetables, manipulation sheets and track layouts serve as input; output tapes provide train sheets similar to dispatchers' records. The track model describes the layout of tracks and interlockings. The train model assigns numbers to salient characteristics such as relative performance, number, origin and destination, routing and scheduled stops, disposition at the end of the run. The train movement model consists of instructions to the computer for moving trains along the track of the track model.

After tests of the model's ability to duplicate variations in operating occurrences, the railroad study committee considered that the technique was a valid one, and recommended extending it to cover the full 24-hour day, and the road's entire electrified portion.

● **Too many agencies?** As caretaker of the LIRR for the state, the MCTA has an interesting task cut out for it, steering through a thicket of public agencies which keep an eye on the Long Island. In the transportation field alone, there can be counted the New York State Office of Transportation, the Tri-State Transportation Commission, the Queens-Long Island Demonstration Program—not to mention the dispenser of federal-aid funds, HUD.

The jobs these agencies do are valuable, but all address themselves to isolated aspects of the LIRR's activities; the MCTA will have to be the one to tie all the strings together. ■

WATCHING **WASHINGTON** WITH WALTER TAFT

TAFT

ICC CORRECTS ERROR—Subsequent growth of the water carriers' business has proved that the ICC was wrong in 1963 when it condemned some water-competitive railroad rates as destructive competition. The 1963 condemnation was by the Commission's Division 2. It is now reversed by the entire Commission which relied on the water carrier traffic figures, and on new and revised cost evidence which left it without confidence in the data used by Division 2.

In giving the railroads this win, however, the Commission did it without accepting two major railroad contentions—that cost figures for subsidized carriers should reflect the public spending, and that the low-cost mode in a competitive situation should be identified on the basis of out-of-pocket costs rather than full costs. The case is No. 33571, and the Commission's report is by Commissioner Paul J. Tierney. Railroad rates in issue are limited-transit rates on grain from Idaho, Washington and Oregon to Northwest Pacific ports. They compete with all-barge and truck-barge services using the Columbia and Willamette Rivers, and some of them have been in effect more than five years.

PRECEDENT SETTER UPSET—The now-reversed Division 2 decision was the first Commission determination of what constitutes destructive competition in light of the U.S. Supreme Court's ruling in the New Haven case. That 1963 decision of the Court was its first [illegible] rate-freedom provision, which is now Section 15a(3) of the Interstate Commerce Act.

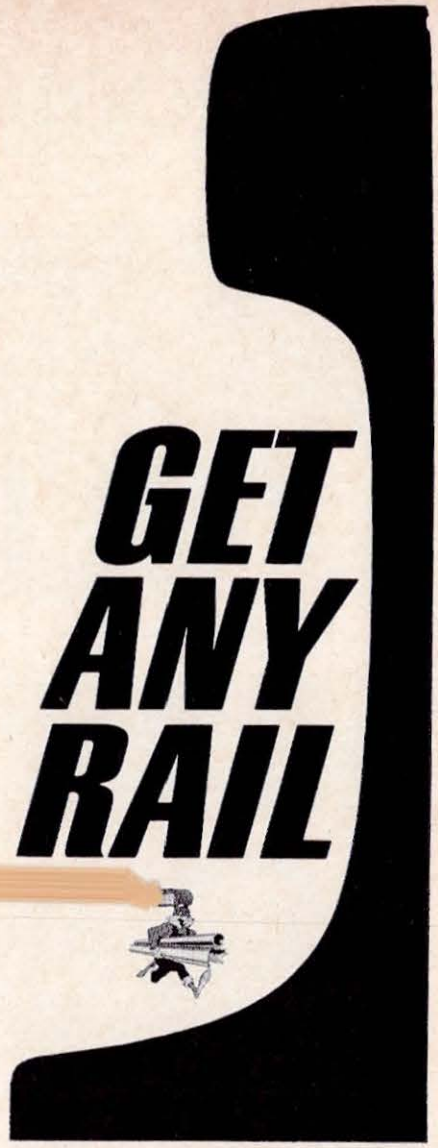
The Court set aside, as proscribed umbrella rate making, a Commission order requiring that railroad rates be 6% higher than competing rates of water carriers in the Atlantic-Gulf coastwise trade. The Court also held, however, that the rate-freedom provision's tie-in with the National Transportation Policy's call for avoidance of "unfair or destructive competition" was a substantative part of that provision—added by Congress to prevent a carrier from setting rates "below its own fully-distributed costs, which would cause a competitor with a cost advantage to establish an unprofitable rate in order to attract traffic."

COST DATA DISCOUNTED—With that guideline in mind, Division 2 used the full-cost basis to identify the all-barge and barge-truck routes as the low-cost mode for the traffic at stake. Following through to apply the Court's precept, it found the railroad rates "unfair and destructive" because they are below the railroads' own full costs, and have "forced the competition, which has the cost advantage, to establish unprofitable rates."

As to the truck-barge routes, the Commission's review led it to conclude that no determination of the low-cost mode from the truck-barge origins could be made. That's because the truck-cost figures of record, when properly adjusted, "lack probative value." And from the all-barge origins, the railroad rates "exceed barge rates and barge fully-distributed costs."

COMPETITIVE NEED IS ADEQUATE REASON FOR CUT—Where there is competitive necessity for such rates, "as here," there is no basis for condemning them as a destructive practice, the Commission said. Then came its reference to the increasing water traffic as another caster of doubt on the validity of Division 2's adverse ruling.

Though the railroad rates do produce "hard competition," that is not enough to condemn them as destructive, the Commission notes. There it relies on the New Haven case, interpreting the Supreme Court's decision as one which left much room for hard competition—because Congress did not intend to prohibit a carrier from establishing a rate, not detrimental to its own revenue requirements, "simply because that rate would divert some or all of the traffic from a competing mode."



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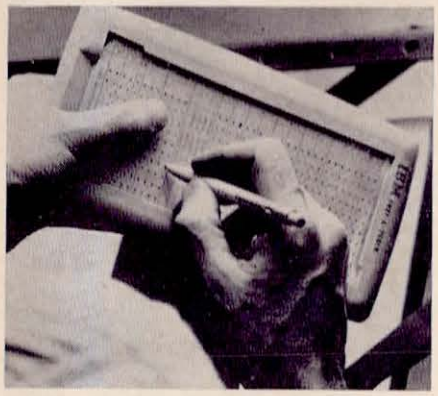
NEW PRODUCTS REPORT



Car Inspection System (RA-1)

Substantial per-diem savings are reported on the Milwaukee through the use of a single type of IBM Port-A-Punch card which has been adopted as part of a new car-inspection procedure to classify general service box cars, gondolas and flat cars. No special training is needed to use the equipment. Each car inspector is equipped with a Port-A-Punch board and stylus, the board acting as a punching device for manually punching appropriate data into the card. The card accommodates such data as car initial and number; type of car and physical specifications; cleanliness; condition of floor, side and end lining, roof and door post. Four cards are used simultaneously. Two are attached to the car sides to show that car has been inspected and to give data on its condition; one is for inspector's file; the fourth goes to the nearest yard office where teletype paper tape is created to transmit inspection data to Division Car Distribution. *IBM World Trade Corp.*

Motor Grader (RA-2)

A new motor grader, designated No. 14E, is designed for high production and versatility. The controls are said to permit easy operation and precision control of the blade lift, circle reverse and sideshift. They are hydraulically actuated but mechanically driven. Self-adjusting disc brakes in the control box are said to prevent blade creep.

Precise blade positioning is provided by planetary blade-lift gears which are mounted forward on the main frame. Operator visibility is said to be excellent because the planetaries are mounted out of operator's line of sight with the moldboard.

The operator's compartment is designed to insure maximum comfort and optimum efficiency. The low-profile dash provides good forward visibility and all controls are within easy reach.

No. 14E is powered by a Caterpillar D333 turbocharged diesel engine rated at 150 hp at 2,000 rpm. *Caterpillar Tractor Co.*

Facsimile System (RA-3)

Documents, messages and all forms of sketches or drawings may be transmitted from one point, and faithfully reproduced via facsimile at another point, where telephone service exists. The Mufax system consists of a transmitter connected to the telephone by a switch, and a receiver at the distant end also connected to the telephone by a switch.

To transmit a document, a telephone call is made in the normal manner. When contact is established both the switches are pressed and facsimile will begin.

The transmitter will accept documents of any size up to a maximum of 14 in. x 8-5/8 in. The standard machine f r use on public telephone and private wire circuits will transmit this size in a little over 6 minutes. This represents a transmission speed of 27 sec per inch of copy. From a standard typewritten copy, over 1000 words can be transmitted at a rate of 150 words per minute.

Power supply requirement is 105 to 125 volts or 200 to 240 volts; current 60 cps. *Muirhead Instruments Inc.*

Repair Tape (RA-4)

P 12A body repair tape of heavy aluminum foil can be used for quick repair of gouges, rips or tears in aluminum, stainless-steel or steel truck bodies; for sound and vibration damping; for sealing plastic window seams; and for waterproof sealing over clincher strips and top side rails. The tape is laminated to a strong fabric and impregnated with a rubber-base, instant-sticking adhesive. It is available in 3-in., 6-in., and 10-yd sizes. *Permacel.*

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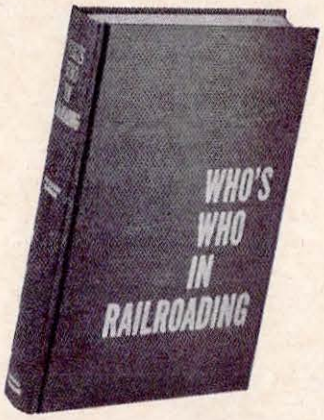

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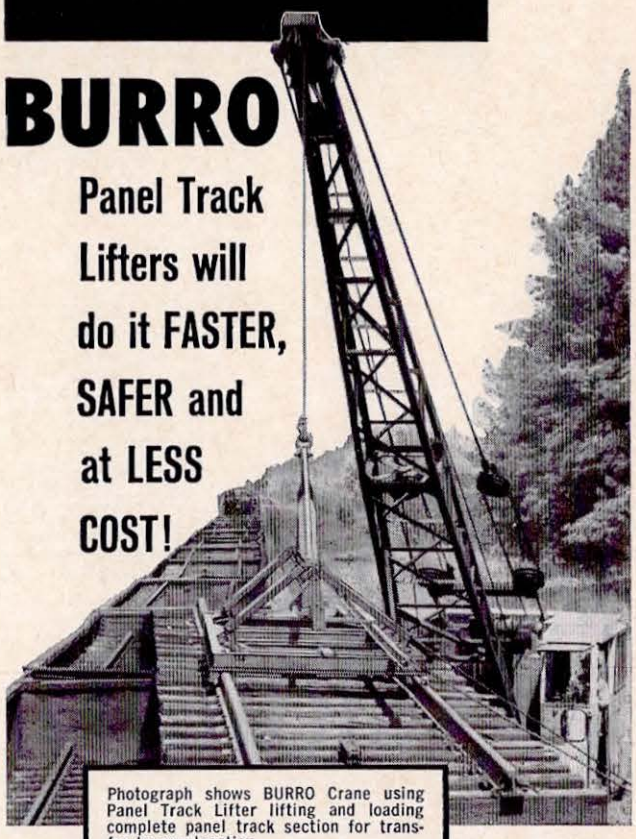
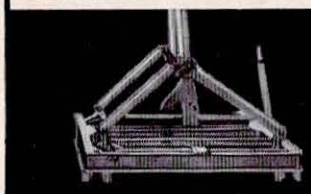


Photograph shows BURRO Crane using Panel Track Lifter lifting and loading complete panel track section for transfer to new location.



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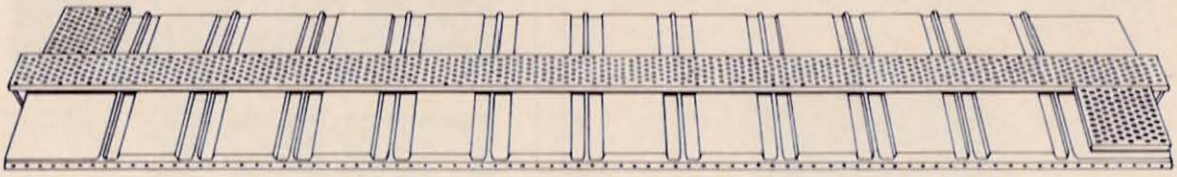
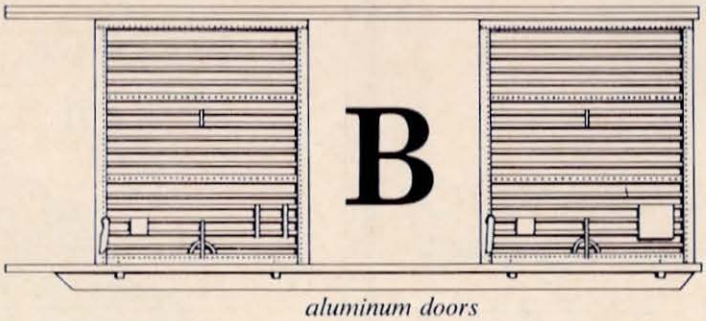


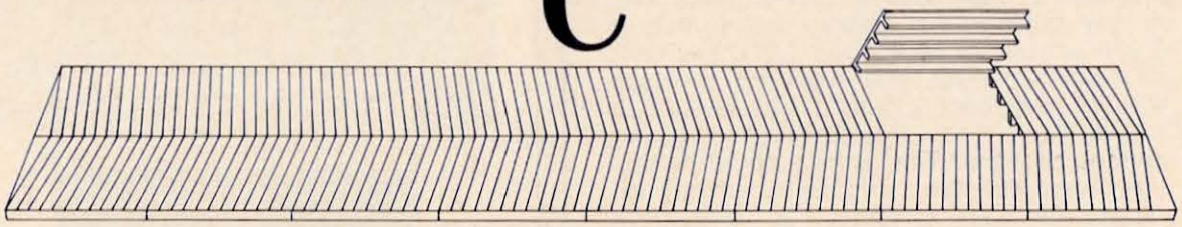
aluminum roof **A** *and running board*



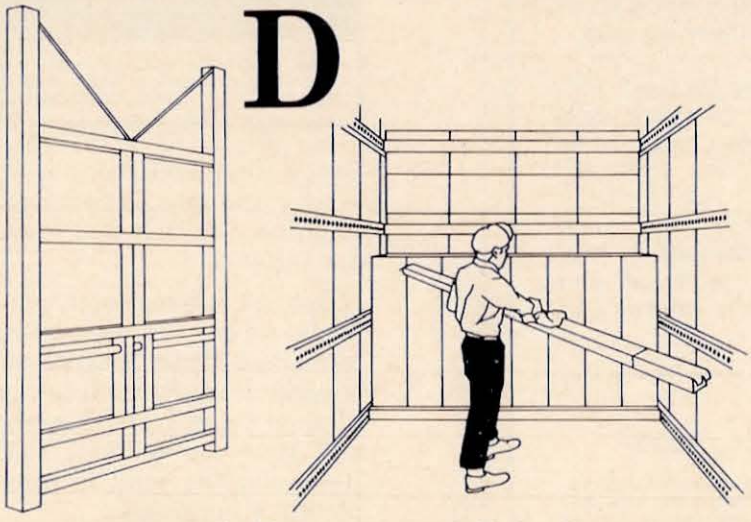
B

aluminum doors

C

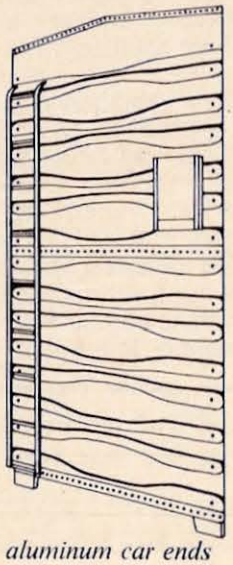


aluminum linings and floors



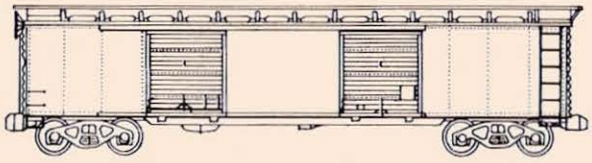
D

aluminum bulkheads and extruded lading bars



E

aluminum car ends



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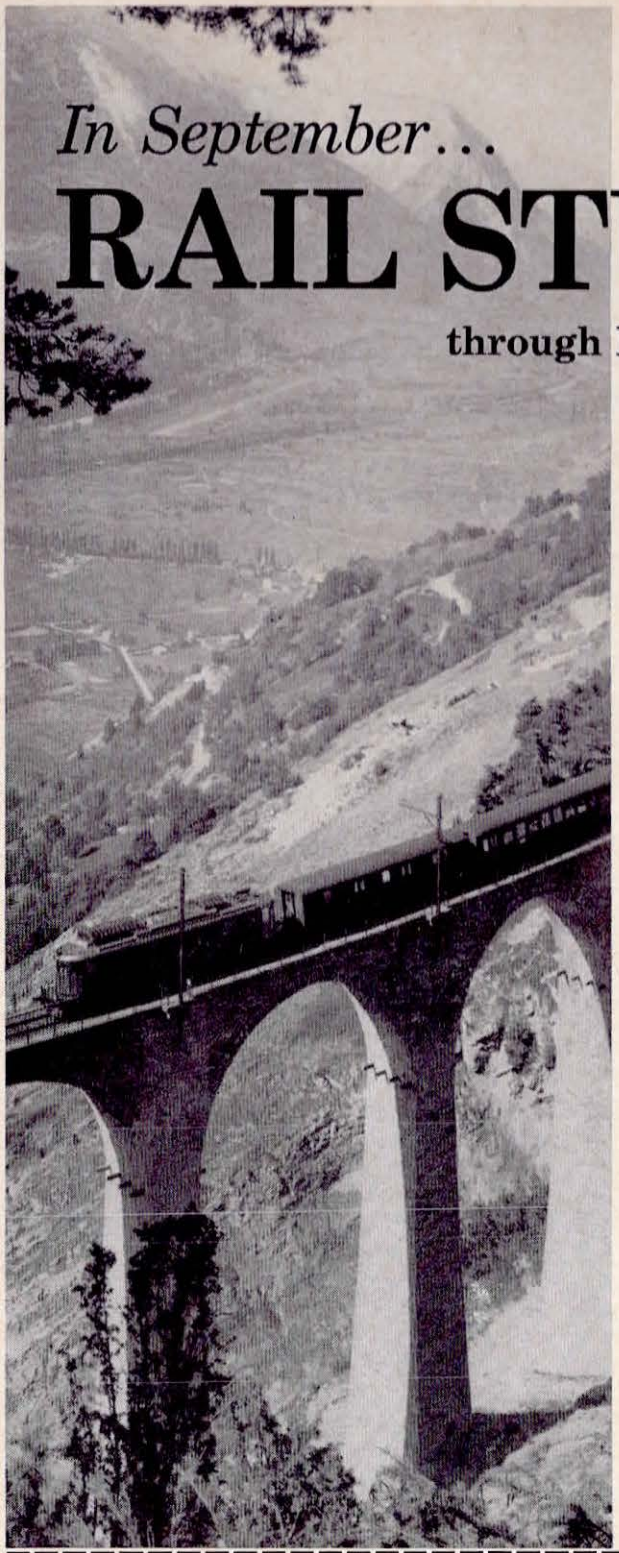

In September...

RAIL STUDY TOUR

through Europe's busy passenger traffic hub

Sponsored by Railway Age

What makes that hardy perennial – European rail travel – thrive? What can we learn from their operations?

A group of kindred spirits professionally interested in the passenger side of railroading will get some of the answers during Railway Age's forthcoming Passenger Study Tour. A distinct fringe benefit–travel through Europe's most fabulous scenery, and a weekend at a world famous resort.

The tour will be headed by a member of the staff of Railway Age. The group will leave from Kennedy Airport, New York, Tuesday, Sept. 6th on Swissair Flight 113, and return Sept. 20th. The itinerary includes visits to Switzerland, Italy, France, Holland and Germany, with stop-overs at Geneva, Berne, Milan, Nice, Paris, Amsterdam, Utrecht and Frankfurt. Apart from the air trip to and from Switzerland and a Riviera motor tour, travel will be all-rail, including trips on the finest Continental name trains. Arrangements have been made for conferences with passenger officials in each of the countries visited–exchanges bound to be mutually beneficial. There will also be ample opportunity for sightseeing tours in the cities scheduled, and leisure periods to do with as you please.

The Passenger Study Tour is offered at cost–$775–which includes air fare, First Class rail accommodations, de luxe hotel rooms, hotel gratuities, two meals a day at hotels, and dining car meals. A tour conductor will function throughout the entire European itinerary. An optional extra week in Europe involving no additional outlay for the return trip is available to those interested. Your Eurail pass allowing free rail travel will also still be valid.

This will be a rewarding experience–one you will long remember. A timetable outlining the complete itinerary is available on request. Early reservation is advisable as capacity is limited. Please use the convenient coupon herewith and plan now *to go!*

This is the second Railway Age European Tour this year. A Rail-Transit Seminar Tour–July 19 to Aug. 4–will visit six countries, including England and Russia.

MR. ROBERT G. LEWIS
Railway Age Passenger Study Tour, 30 Church St., New York, N.Y. 10007

☐ Please make reservations for the following persons on the Sept. 6-20 Tour.

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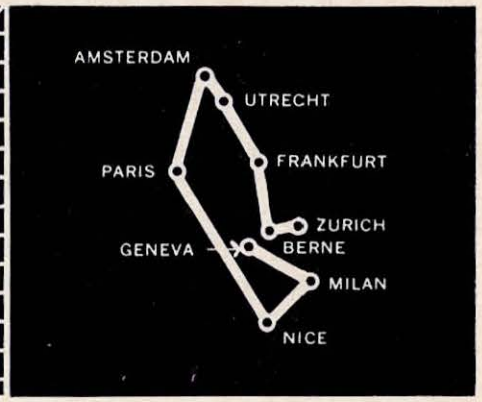

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended April 2 were not available as this issue went to press.

PIGGYBACK CARLOADINGS—U.S. piggyback loadings for the week ended March 26 totaled 21,914 cars, carrying 37,194 trailers, compared with 19,997 cars, carrying 31,899 trailers, in the corresponding 1965 week. Loadings for 1966 up to March 26 totaled 249,576 cars, carrying 412,486 trailers, compared with 225,337 cars, carrying 363,443 trailers, in the corresponding period of 1965.

Dual-service tank cars from GATX

New railroad tank cars, designed to transport products at pressures up to 255 psig, are marking important firsts for two major corporations.

General American Transportation Corp. said the cars are the first it has manufactured with fittings for two types of service—compressed gas or general service. For Tube Turns division of Chemetron Corp., the cars represent the firm's first entry into the supply of high-pressure manway closures to the railroad industry.

The GATX cars can be switched from high-pressure compressed gas service to general service without a physical change-over of equipment. When reassignment is made, only cleaning, purging and inspection of condition is necessary.

To facilitate frequent inspection and cleaning, and to provide for downspout loading of low-pressure products, the tanks are provided with an 18-in. Tube-Turn hinged and bolted manway. The closure combines quick-opening features with a design suitable for the pressures involved.

The cars will have a maximum capacity of 124,000 lb of product and a total weight on rail of 177,000 lb. The tanks will be completely stress-relieved after they are completed.

FREIGHT-TRAIN CARS

► *Canadian National.*—Ordered 25 90-ton covered gondola cars from International Equipment Co., Ltd., to transport steel cable. The cushioned underframe cars will each have eight compartments to prevent the shifting of cargo. Delivery will begin in August.

► *Norfolk & Western.*—Will build 1,000 steel, roller-bearing hopper cars in its Roanoke Shops at a cost of $10.5 million. The road will also spend $170,000 to convert 50 flat cars into bulkhead lumber cars. Production of the new hoppers will begin in June when a previous order is completed.

March Bad Order Ratio 0.6% Lower Than Last Year.—Class I roads on March 1, owned 1,480,449 freight cars, 15,645 less than on March 1, 1965, according to AAR report summarized below. Bad Order Ratio was 0.6% lower than on March 1, 1965.

	March 1, 1966	March 1, 1965	Change
Car ownership	1,480,449	1,496,094	—15,645
Waiting repairs	79,695	89,382	— 9,687
Repair ratio	5.4%	6.0%	— 0.6%

PIGGYBACK

► *Trailer Train.*—Ordered 24 standard level flat cars from Bethlehem Steel Co., and 1 all-purpose flat car from General American. The new orders bring Trailer Train's purchases of new cars since Jan. 1 to 2,441. TTX now has a total of 32,554 cars in service or on order.

LOCOMOTIVES

► *Belt Railway of Chicago.*—Ordered three 2,400-hp Century 424 diesel-electric units from Alco for delivery in April.

NEW FACILITIES

► *Canadian Pacific.*—Has ordered CTC signal equipment from Union Switch & Signal division of WABCO for installation from Cartier to Current River, Ont., about 500 miles. The entire distance will be controlled from a 21 ft CTC machine located at Schreiber, Ont.

► *Chicago & North Western.*—Ordered type E-1 all-electric retarder equipment from General Railway Signal Co. for installation at the car classification yard, Proviso, Ill.

► *Louisville & Nashville.*—Will begin construction of a 10,220-ft concrete and steel bridge at Bay St. Louis, Miss., at a cost of $4,984,000. The structure will have a 260-ft through-truss swing span; approaches will be either steel or pre-stressed concrete. All work will be contracted, and the project will require about two years for completion. L&N also plans two major yard-improvement projects. At Sibert Yard, Mobile, Ala., the road will spend $546,139 on track revisions, construction of a new yard office and yardmaster's tower, installation of power and communication lines and improvement of piggyback and mechanical facilities. At Birmingham, Ala., L&N will spend $783,388 for improvements involved in Boyles Yard joint handling of L&N and Atlantic Coast Line business. The project, scheduled for completion April 30, involves trackage changes and improvements in signal, communications and mechanical facilities.

YOU OUGHT TO KNOW

New food service on C&O-B&O: Passengers on certain Chesapeake & Ohio and Baltimore & Ohio trains are now able to buy low-cost "eat-in-your-seat" meals in specially equipped coaches. The railroads have inaugurated their Food Bar Coach service on the westbound "Chicago Express" and the eastbound "Diplomat" between Chicago-Washington-Baltimore. It will be extended to other trains in the near future. Sandwiches or complete hot meals can be selected by passengers at a stainless-steel food preparation center at one end of the coach, served by an attendant with the title of "Foodmaster." Passengers can then take their food to their seats on special trays. The railroads began the service after a six-month study made in conjunction with the Cornell University School of Hotel Administration.

CN reorganizes passenger sales: Canadian National has revamped its passenger sales organization in the Eastern U.S. and named F. K. Moore to head up the operation with headquarters in New York City. Moore, formerly general passenger agent, New York, has been appointed passenger service manager, Eastern United States, with jurisdiction over Boston, Washington, Philadelphia and New York. The road plans to put greater dependence on the travel agent as the company's contact with the traveling public, and such agents and CN field men will channel sales through the New York passenger service bureau. A special staff in Boston will handle anticipated heavy seasonal traffic on CN's Bar Harbor, Me.-Yarmouth, N.S. ferry service.

Foreign visitors for PRR: Six Indian Railways officers have arrived in this country for a six-month look at American railroad procedures—and to determine how they can be applied to benefit the rail system back home. The Pennsylvania will be their host for three weeks, during which the Indians will have conferences with system officials, tour freights yards, inspect piggyback operations, and observe commuter operations. The State Department has arranged the tour with the PRR and other roads to demonstrate time-study principles, locomotive and car utilization, purchasing and pricing practices, safety, signaling, track design data processing and materials management methods.

Castings market grows: To meet a rising demand for malleable iron and steel castings, Midland-Ross Corp. plans to spend $6.7 million at the Chicago Works of its National Castings Division to increase productive capacity. The expenditures will provide for a completely automatic foundry installation, continuous heat-treating facilities for both ferritic and pearlitic malleable iron, and major improvements to cleaning and finishing operations. The company described the project as the "first phase of a large-scale modernization and expansion program."

Scales to weigh unit trains: Pennsylvania Power & Light Co., which supplies its power plants with coal moved by unit trains, has invested $65,000 in a new electronic scale system for its rotary car dumper at its Sunbury, Pa., plant. The company said it expects annual savings of up to $65,000 a year compared with the former method of weighing cars. This is the third PP&L plant to be equipped with the scales.

Air Force train on the D&H: For the next five months a sidetrack of the Delaware & Hudson along Lake Champlain will be home for the U.S. Air Force's radar bomb scoring train. The train, one of three maintained by the Air Force, is used for the scoring of bombing exercises by the Strategic Air Command.

Truck tonnage: Intercity truck tonnage in the week ended March 26 was 0.5% below that of the previous week, and 3.7% ahead of the volume in the corresponding week of 1965, according to American Trucking Associations.

Current statistics

Net Income	
12 mos., 1965	$815,000,000
12 mos., 1964	694,000,000
Carloading, revenue freight	
12 wks., 1966	6,443,749
12 wks., 1965	6,320,583
Freight cars on order	
Mar. 1, 1966	51,760
Mar. 1, 1965	34,703
Freight cars delivered	
2 mos., 1966	13,987
2 mos., 1965	13,053
Serviceable cars	
Mar. 1, 1966	1,400,754
Mar. 1, 1965	1,398,903

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PEOPLE IN THE NEWS

CANADIAN NATIONAL.—John L. Cann appointed assistant general manager, Great Lakes Region, Toronto, Ont. Mr. Cann had been on leave of absence as managing director, **Ontario Northland,** North Bay, Ont.

S. E. Spencer, operations manager, Chaleur Area, Campbellton, N.B., appointed manager, Lakehead Area, Port Arthur, Ont., succeeding **C. T. Cameron,** named general manager, Atlantic Region.

G. H. Workman, engineer of construction and fire prevention, appointed bridges and structures engineer, Great Lakes Region, Toronto, and his former position abolished. **J. Jeronimus,** structural engineer, appointed assistant engineer bridges, Great Lakes Region. Title of **C. S. Dunn** changed from assistant engineer of construction to assistant engineer structures, Great Lakes Region. **S. J. Tompkins,** engineer—maintenance, Capreol, named area engineer, Northern Ontario Area, Capreol, Ont., succeeding **A. E. Monaghan.**

CHESAPEAKE & OHIO.—C. M. Krieve, trainmaster, Lansing, Mich., promoted to assistant superintendent, Grand Rapids, Mich., succeeding **M. W. Karsten,** transferred to Saginaw, Mich. **W. H. Ragland,** trainmaster, Flint, Mich., transferred to Saginaw, to succeed **A. H. Weber,** who replaces Mr. Krieve at Lansing. **R. C. Clarke,** trainmaster Saginaw, transferred to Flint, succeeding Mr. Ragland. **A. W. Baker** appointed terminal trainmaster, Toledo Terminal—Walbridge—Presque Isle, at Walbridge, Ohio, succeeding **H. J. Wurdack,** who retired Jan. 1.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.— At Chicago Terminals: **K. R. Hanegan, P. J. O'Connell** and **K. L. Eldridge** named trainmasters and **T. E. Chester** appointed terminal trainmaster.

J. C. Musser, Jr., appointed manager property protection, Baltimore, Md. **R. B. Meade** named general superintendent of police, Baltimore.

Ted J. Boczek, C&O lake coal traffic agent, Cleveland, named director of lake coal traffic, coal business development department, C&O, Cleveland.

CHICAGO & NORTH WESTERN.—M. L. Stuckey named assistant to comptroller. **Z. Ostapiuk** appointed auditor passenger and station accounts.

DENVER & RIO GRANDE WESTERN.—Clarence R. Lennig, general traffic manager, named assistant vice president—traffic, Denver, to succeed **Harold F. Burnaugh,** who retired Apr. 1 after 41 years' service. **Jack D. Key,** freight traffic manager, promoted to succeed Mr. Lennig. **Harold E. Cash,** trainmaster, Colorado division, appointed traffic manager, to replace **John B. Norwood, Jr.** Mr. Norwood, who has been traffic manager on temporary assignment since Jan. 1, will return to his former position of superintendent, Colorado division.

GRAND TRUNK WESTERN.—Delbert M. Bressette, assistant general superintendent equipment, Battle Creek, Mich., named general superintendent equipment there, to replace **Harold W. Askew,** retired.

GREAT NORTHERN.—Has reorganized its freight traffic department and created three functional areas: sales and service, pricing and market research. The sales and service head is **G. D. Johnson,** named general sales manager. **V. P. Brown,** assistant vice president-traffic, will supervise pricing, which was formerly known as rates and service. Three pricing managers under him are **E. W. Bergstrom** and **T. N. Hackney,** both at St. Paul, and **E. F. McGuire,** Seattle. Market research is directed by **T. P. Heller.**

ILLINOIS CENTRAL.—A. M. Dickerson, superintendent Memphis division, named assistant superintendent of transportation, Chicago. **H. G. Mullins,** assistant superintendent, St. Louis division, succeeds Mr. Dickerson, and in turn is replaced by **James M. Law,** trainmaster, Waterloo, Iowa. **E. W. Jantz,** assistant supervisor freight train service, named supervisor freight train service, succeeding **A. W. Peterson,** retired. Mr. Jantz' successor is **H. E. Hawkins,** clerk in the office of general superintendent of transportation.

KANSAS CITY SOUTHERN.—H. C. Sibley named freight claim agent, Kansas City, Mo., succeeding **W. A. Sarasin,** who retired March 31 after nearly 48 years of service.

LOUISVILLE & NASHVILLE.—Lawrence D. Miskell, general agent, Detroit, named traffic manager, Louisville. Mr. Miskell's successor is **John R. Newton,** district freight agent, Tulsa. **Neil F. Heffernan,** freight traffic agent, Detroit, appointed freight traffic agent—automotive there. **Billy P. Lane,** chief clerk, Evansville, Ind., replaces Mr. Heffernan. **William G. Haley,** chief clerk, Birmingham, named freight traffic agent, Mobile, replacing **W. E. Dial,** named commercial agent there.

MILWAUKEE MOTOR TRANSPORTATION CO.—Lawrence H. Tietz, supervisor of maintenance-system, Chicago, named assistant vice president there. **Donald J. Kinsfather,** manager of eastern operations, appointed director of maintenance, Chicago.

MISSOURI-KANSAS-TEXAS.—David F. Pilkinton, master mechanic, Denison, Tex., named superintendent of the locomotive shops, Parsons, Kans., to succeed **C. M. Bennett,** resigned.

MISSOURI PACIFIC-TEXAS & PACIFIC.—F. E. Richter elected vice president, Washington, D.C. **J. N. Sanders** elected vice president with jurisdiction over the Northern and Central districts and headquarters at Kansas City, Mo. **Gardner J. Wilkes** named executive representative, Washington. **Donald P. Schleh,** executive assistant to the president, advanced to assistant to the president.

Ronald S. Crossman, general freight traffic manager-rates and divisions, St. Louis, named assistant vice president-marketing and research. **George A. Craig,** assistant vice president-traffic, Gulf, Southwestern and Southeastern regions, Dallas, appointed assistant vice president-sales and service, St. Louis. **Ralph A. Barger,** assistant traffic manager, Southern region, Little Rock, Ark., promoted to assistant to the vice president-traffic, St. Louis, succeeding Mr. Wilkes. **William J. Boewer,** freight traffic manager-rates and divisions, St. Louis, named general manager-pricing and divisions. **Nathaniel E. Kernell,** freight traffic manager-rates and divisions, St. Louis, named assistant general manager-pricing and divisions. **James S. Goode,** formerly research specialist, **Western Railroads Traffic Assn.,** Chicago, joined **MP** as assistant traffic manager-traffic research, St. Louis. Mr. Barger's successor is **Clyde E. Hirsh,** general agent, Minneapolis, who in turn is replaced by **Robert K. Thornton,** general agent, Ft. Worth, Tex. **Bruce C. Rayburn** named assistant traffic manager, Memphis. **J. C. Goyette** replaces Mr. Rayburn as general agent, St. Louis. **James W. McCoy, Jr.,** general agent, Tulsa, Okla., appointed general agent, Oklahoma City, Okla. **T. S. Glass,** general agent, Memphis, retired March 31.

NEW HAVEN.—J. A. Ruotolo appointed manager station services, New Haven, Conn. **N. A. Walsh** named assistant manager station services and supervisor of centralized billing and collections.

ONTARIO NORTHLAND.—As a result of organizational changes, duties heretofore related to the managing director, will be assumed by **E. A. Frith,** general manager and chief executive officer, North Bay, Ont.

PENNSYLVANIA—W. Llewellyn Millar, general passenger agent, Chicago, appointed general passenger agent, Eastern region, Philadelphia, succeeding **Henry W. Ring,** retired April 1, after 41 years' service.

ROCK ISLAND.—Howard S. Ownley, manager of marketing in the trailer service department, appointed manager of sales and marketing for the department.

WESTERN MARYLAND.—Frank L. Etchison, chief engineer, Baltimore, promoted to assistant to

William Blackie
Caterpillar

William H. Franklin
Caterpillar

the president—engineering. **Roy R. Gunderson,** engineer maintenance of way, promoted to chief engineer.

Supply Trade

Hal P. Kibbey, vice president, **Stanray Corp.,** Chicago, has been elected president and chief executive officer (RA, April 4, p. 34). **R. Arthur Williams,** who has held the position of chairman, president and chief executive officer concurrently, will continue as chairman.

John W. Schnaitman has been named sales manager of **Railway Automated Machinery Co.,** Chicago (RA, March 28, p. 107). He was formerly vice president in charge of sales of **Enterprise Railway Equipment Co.,** Chicago.

William Blackie, president, **Caterpillar Tractor Co.,** has been elected chairman of the board, to succeed **Harmon S. Eberhard,** retired. **William H. Franklin,** executive vice president, replaces Mr. Blackie.

C & D Batteries of Conshohocken, Pa., has named the following railroad sales and service representatives in the Midwest: **Western States Supply Co.,** headed by **Clarence C. Turner,** 1517 Harney Street, Omaha, Neb. and **Collins Equipment Co.,** owned and operated by **Edward M. Collins,** 80 E. Jackson Blvd., Chicago.

George W. Jernstedt, general manager, transportation and industrial equipment divisions, **Westinghouse Electric Corp.,** Pittsburgh, announced appointment of **W. Perry Bollinger** as general manager of a new transportation division. Mr. Bollinger was formerly manager, high-speed ground transportation project.

Dwane R. Wheeler has been appointed transportation systems analyst, **Union Switch & Signal Division, Westinghouse Air Brake Co.** Mr. Wheeler was formerly trainmaster, **Youngstown & Northern,** prior to which he was industrial engineer, **Bessemer & Lake Erie.**

Stanley H. Barriger, industrial engineer, **Missouri Pacific,** St. Louis, has joined **Gibbs & Hill,** New York, as assistant engineer.

C. F. Hammond, III, development engineer, **Great Dane Trailers, Inc.,** Savannah, Ga., advanced to assistant sales manager.

R. E. Shaw has joined the marketing organization of **Interlake Steel Corp.,** Chicago as a product specialist in the field of carloading. Mr. Shaw formerly was a sales representative, **Chesapeake & Ohio.**

Patrick E. Kraft, treasurer of the **Marion Power Shovel Division** of **Universal Marion Corp.,** has been named treasurer and chief financial officer of the **Scullin Steel Division.**

OBITUARY

John J. Brinkworth, 78, retired vice president, **New York Central,** died Jan. 21 at Chicago.

Roy A. Miller, 79, retired land and tax commissioner, **Chicago & North Western,** died April 1 in Lutheran General Hospital, Park Ridge, Ill.

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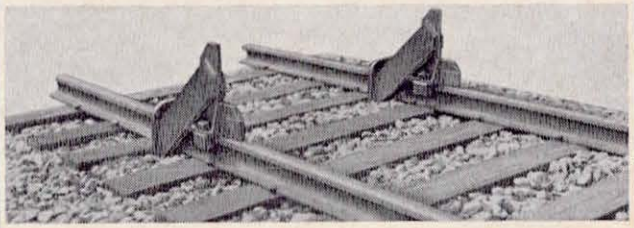

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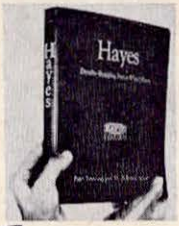

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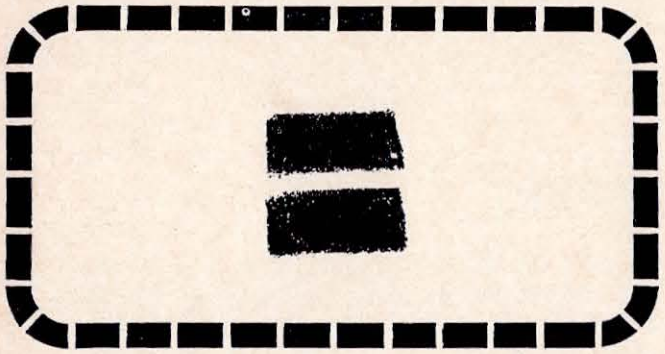

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Sun Gain Shia, Ltd.
Shiba Nikkatsu Bldg.
13, Shiba Park
Minato-Ku
C. H. Yiu, Managing Director

Duane C. Salisbury, executive vice president, director of sales, New York

THE ACTION PAGE

What did the Firemen prove?

It's hard to know just where to begin, in assessing the damage done by the strike of the Brotherhood of Locomotive Firemen & Enginemen which began one minute after midnight on the morning of March 31. And it's even more difficult to arrive at some conclusion as to how the leaders of this particular labor organization—short of outright and continuing compulsion—can be convinced that anachronisms can't be maintained by blind devotion to conditions that no longer exist.

For whatever satisfaction it provides, the BLF&E seemed to prove—in this instance—that it could shut down a few railroads; that it had a certain measure of support, at least initially, from other labor unions; and that the Administration would try every other route before applying compulsion, even when federal court orders appeared to be violated. But satisfaction could well be a one-time thing. It is not outside the realm of probability that next time around—if there should be one—the BLF&E would find that 12:01 a.m. March 31, 1966, marked the end of the line.

A senseless strike

In searching around for some way to describe this strike, the word "senseless" comes to mind. It was founded on a base which may have been technically legitimate—that's a point for the lawyers to argue and the courts to decide. Technicalities aside, however, hardly anybody seems to believe that the BLF&E walked out for the reason it cited—namely, that the railroads had refused to negotiate on a demand for a training program.

So the base was weak, and it didn't hold up in the court of public opinion. The BLF&E must have known this would be the case. After all, one of its main arguments all along had been for automatic re-establishment of the thousands of firemen's jobs abolished under the award of Arbitration Board 282. But a federal court had restrained the union from walking out March 31 over this issue. And so it's difficult to regard the training-program issue as anything but a substitute reason.

Quite a bit might also be said about the union's "terms" for ending the walkout. There were to be no reprisals against individual firemen and there were to be promises that the carriers would not press contempt citations or sue the union for damages. The matter of "reprisals" was never an issue, never a problem.

But, while it may have been good public relations for the BLF&E to make a point of "protecting" individuals, its other two demands left only a bad taste—and the impression that the organization wanted no part of liability or responsibility for its actions.

Did the BLF&E gain anything tangible by its four-day strike? The answer has to be negative. The union won no contract gains; its bargaining position is not strengthened; the railroads haven't changed their firm position against putting firemen back on diesels.

Adding up the cost

The strike may, in a sense, have made heroes of top BLF&E officers to the warhawks in the union—some observers think it quite possible that the "hawks" were exerting strong pressures to "do something" regardless of consequences. But the damage done—to the railroads, to the nation generally, to the rest of organized rail labor—seems an awful price to pay.

The affair of the 31st of March isn't over, though the eight struck railroads are operating again and the nation's commerce is getting back to normal. There may be additional court proceedings regarding the walkout specifically, and there will certainly be more days spent in court over the fireman case generally. And, while arguments and court proceedings can seem to continue almost indefinitely, sometime there has to be a summing up.

Three public bodies—a Presidential Railroad Commission, an emergency board and an arbitration board—have said firemen are not needed. Railroads have given displaced firemen better consideration than displaced employees in other industries have had. Operating experience over two years has proved the fireman isn't needed; and the BLF&E hasn't been able to prove its argument to the contrary in any forum, anywhere. In short, the job of "fireman" is dead and gone—and, while realization of this may come slowly to the BLF&E, it has to come.

There is no particular satisfaction to be gained from contemplating the demise of a craft or the death of an organization which has fewer and fewer men left to represent. But progress has caught up with the craft—and neither the railroad industry nor the rest of rail labor nor the nation itself is run for the benefit of this single labor organization. The fact may be a harsh one—but it is a fact.

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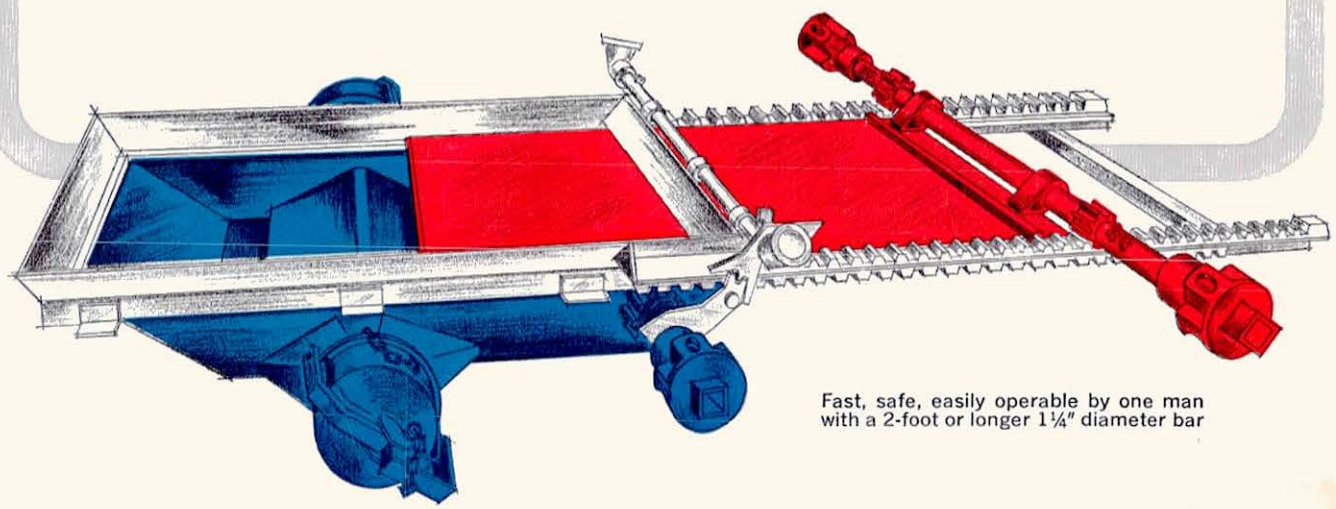

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